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JOHN BURNET OF BARNS.

A ROMANCE.

BY JOHN BUCHAN,

AUTHOR OF 'SIR QUIXOTE;' 'SCHOLAR GIPSIES;' 'GREY WEATHER,' &c.

CHAPTER I .- THE ADVENTURE WHICH BEFELL ME IN THE WOOD OF DAWYCK.



HAVE taken in hand to write this, the history of my life, not without much misgiving of heart; for my memory at the best is a bad one, and of many things I have no clear remembrance; and the making of

tales is an art unknown to me, so he who may read must not look for any great skill in the setting-down. Yet I am emboldened to the work, for my life has been lived in stirring times and amid many strange scenes which may not wholly lack interest for those who live in quieter days. And, above all, I am desirous that those of my family should read of my life, and learn the qualities, both good and bad, which run in the race, and so the better be able to resist the evil and do the good.

I will begin my tale with a certain June morning in the year 1678, when I, scarcely turned twelve years, set out from the house of Barns to the fishing in the Tweed. I had escaped the watchful care of my tutor, Master Robert Porter, the curate of Lyne, who vexed my soul thrice a week with Cæsar and Cicero. I had no ill-will to the Latin, for I relished the battles in Cæsar well enough, and had some liking for poetry; but when I made a slip in grammar he would bring his great hand over my ears in a way which would make them tingle for hours. And all this, mind you, with the sun coming in at the window, and whaups whistling over the fields, and the great fish splashing in the river. On this morning I had escaped by hiding in the cheese-closet; then I had fetched my rod from the stable loft, and borrowed tackle from Davie Lithgow, the stableman; and now I was creeping through

the hazel-bushes, casting every now and then a glance back at the house, where the huge figure of my teacher was looking for me disconsolately in every corner.

The year had been dry and sultry; and this day was warmer than any I remembered. The grass in the meadow was browned and crackling, all the foxgloves hung their bells with weariness, and the waters were shrunken in their beds. The mill-lade which drives Manor mill had not a drop in it, and the small trout were gasping in the shallow pool, which in our usual weather was five feet deep. The cattle were 'stertling,' as we called it in the country-side—that is, the sun was burning their backs—and, rushing with tails erect, they sought coolness from end to end of the field. The Tweed was very low and clear. Small hope, I thought, for my fishing; I might as well have stayed with Master Porter and been thrashed, for I will have to stay out all day and go supperless at night.

I took my way up the river past the green slopes of Haswellsykes to the wood of Dawyck, for I knew well that there, if anywhere, the fish would take in the shady, black pools. The place was four weary miles off, and the day was growing hotter with each passing hour; so I stripped off my coat and hid it in a hole among whins and stones. 'When I come home again,' I said, 'I will recover it.' Another half-mile, and I had off my shoes and stockings and concealed them in a like place; so soon I plodded along with no other clothes on my body than shirt and ragged breeches.

In time I came to the great forest which stretches up the Tweed nigh to Drummelzier, the greatest Reserved.]

DEC. 4, 1897.

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wood in our parts, unless it be Glentress, on the east side of Peebles. The trees were hazels and birches in the main, with a few rowans, and on the slopes of the hill a congregation of desolate pines. Nearer the house of Dawyck were beeches and oaks and the deeper shade; and it was thither I went. The top of my rod struck against the boughs, and I had some labour in steering a safe course between the Scylla of the trees and the Charybdis of the long brackens: for the rod was in two parts spliced together, and as I had little skill in splicing, Davie had done the thing for me before I started. Twice I roused a cock of the woods, which went screaming through the shadow. Herons from the great heronry at the other end were standing in nigh every pool, for the hot weather was a godsend to them; and the trout fared ill when the long, thief-like bills flashed through the clear water. Now and then a shy deer leaped from the ground and sped up the hill. The desire of the chase was hot upon me when, after an hour's rough scramble, I came to the

spot where I hoped for fish.

A stretch of green turf, shaded on all sides by high beeches, sloped down to the stream-side. The sun made a shining pathway down the middle, but the edges were in blackest shadow. At the foot a lone gnarled alder hung over the water, sending its long arms far over the river nigh to the farther side. Here the Tweed was still and sunless, showing a level of placid black water, flecked in places with stray shafts of light. I prepared my tackle on the grass, making a casting-line of fine horse-hair which I had plucked from the tail of our own gray gelding. I had no such fine hooks as folk nowadays bring from Edinburgh, sharpened and barbed ready to their hand, but rough, home-made ones, which Tam Todd, the land-grieve, had fashioned out of old needles. My line was of thin, stout whipcord, to which I had made the casting firm with a knot of my own invention. I had out my bag of worms, and choosing a fine red one, made it fast on the hook. Then I crept gently to the alder, and climbed on the branch which hung far out over the stream. Here I sat like an owl in the shade, and dropped my line in the pool below me, where it caught a glint of the sun and looked like a shining cord let down, like Jacob's ladder, from heaven to the darkness of earth.

I had not sat many minutes before my rod was wrenched violently downwards, then athwart the stream, nearly swinging me from my perch. 'I have got a monstrous trout,' I thought, and with a fluttering heart stood up on the branch to be the more ready for the struggle. He ran up the water and down; then far below the tree-roots, whence I had much difficulty in forcing him; then he thought to break my line by rapid jerks, but he did not know the strength of my horse-hair. By-and-by he grew wearied, and I landed him comfortably on a spit of land—a great red-spotted fellow with a black back. I made sure that he was two pounds weight, if he was an ounce.

I hid him in a cool bed of leaves and rushes on the bank, and crawled back to my seat on the tree. I baited my hook as before, and dropped it in, and then leaned back lazily on the branches behind to meditate on the pleasantness of fishing and the hatefulness of Master Porter's teaching. In my shadowed place all was cool and fresh as a May morning, but beyond, in the gleam of the sun, I could see birds hopping sleepily on the trees, and the shrivelled, dun look of the grass. A faint humming of bees reached me, and the flash of a white butterfly shot now and then like a star from the sunlight to the darkness, and back again to the sunlight.

It was a lovely summer day, though too warm for our sober country, and as I sat I thought of the lands I had read and heard of, where it was always fiercely hot, and great fruits were to be had for the pulling. I thought of the oranges and olives and what not, and great silver and golden fishes with sparkling scales; and as I thought of them I began to loathe hazel-nuts and rowans and whortleberries, and the homely trout which are all that is to be had in this land of ours. Then I thought of Barns and my kinsfolk, and all the tales of my forebears, and I loved again the old silent valley of Tweed, for a gallant tale is worth many fruits and fishes. Then, as the day brightened, my dreams grew accordingly. I came of a great old house; I too would ride to the wars, to the Low Countries, to Sweden, and I would do great deeds like the men in Virgil. And then I wished I had lived in Roman times. Ah! these were the days, when all the good things of life fell to brave men, and there was no other trade to be compared to war. Then I reflected that they had no fishing, for I had come on nothing as yet in my studies about fish and the catching of them. And so, like the boy I was, I dreamed on, and my thoughts chased each other in a dance in my brain, and I fell fast asleep.

I wakened with a desperate shudder and found myself floundering in seven feet of water. My eyes were still heavy with sleep, and I swallowed great gulps of the river as I sank. In a second I came to the surface, and with a few strokes I was at the side, for I had early learned to swim. Stupid and angry, I scrambled up the bank to the green glade. Here a first surprise befell me. It was late afternoon; the sun had travelled three-fourths of the sky; it would be near five o'clock. What a great fool I had been to fall asleep and lose a day's fishing! I found my rod moored to the side with the line and half of the horse-hair; some huge fish had taken the hook. Then I looked around me to the water and the trees and the green sward, and surprise the second befell me; for there, not twelve paces from me, stood a little girl, watching me with every appearance of terror.

She was about two years younger than myself, I fancied. Her dress was some rich white stuff which looked eerie in the shade of the beeches, and her long hair fell over her shoulders in plentiful

curls. She had wide, frightened, blue eyes and a delicately-featured face; and as for the rest, I know not how to describe her, so I will not try. I, with no more manners than a dog, stood staring at her, wholly forgetful of the appearance I must present, without shoes and stockings, coat or waistcoat, and dripping with Tweed water. She spoke first, in a soft, southern tone, which I, accustomed only to the broad Scotch of Jean Morran, who had been my nurse, fell in love with at once. Her whole face was filled with the extremest terror.

'Oh sir, be you the water-kelpie?' she asked.

I could have laughed at her fright, though I must have been like enough to some evil spirit; but I answered her with my best gravity.

'No, I am no kelpie; but I had gone to sleep and fell into the stream. My coat and shoes are in a hole two miles down, and my name is John Burnet—of Barns.' All this I said in one breath, being anxious to right myself in her eyes; also with some pride in the last words.

It was pretty to see how recognition chased the fear from her face. 'I know you,' she said; 'I have heard of you. But what do you in the Dragon's Hole, sir? This is my place. The dragon will get you, without a doubt.'

At this I took off my bonnet and made my best bow. 'And who are you, pray, and what story is this of dragons? I have been here scores of times, and never have I seen or heard of them.' This with the mock-importance of a boy.

'Oh, I am Marjory,' she said—'Marjory Veitch, and I live at the great house in the wood, and all this place is my father's and mine. And this is my dragon's den;' and straightway she wandered into a long tale of Fair Margot and the Seven Maidens, how Margot wed the dragon and he turned forthwith into a prince, and I know not what else. 'But no harm can come to me, for look, I have the charm;' and she showed me a black stone in a silver locket. 'My nurse, Alison, gave it me. She had it from a beautiful fairy who came with it to my cradle when I was born.'

'Who told you all this?' I asked in wonder, for this girl seemed to carry all the wisdom of the ages in her head.

'Alison, and my father, and my brother Michael, and old Adam Noble, and a great many more'—
Then she broke off. 'My mother is gone. The fairies came for her.'

Then I remembered the story of the young English mistress of Dawyck who had died before she had been two years in our country. And this child, with her fairy learning, was her daughter.

Now, I know not what took me—for I had ever been shy of folk, and above all of womankind—but here I found my tongue, and talked to my new companion in a way which I could not sufficiently admire. There, in the bright sun-setting, I launched into the most miraculous account of my adventures of that day, in which dragons and witches were simply the commonest portents. And

she listened, and thanked me ever so prettily when I had done. Then she would enlighten my ignorance; so I heard of the Red Etin of Ireland, and the Wolf of Brakelin, and the Seven Bold Brothers. Then I showed her nests, and gave her small blue eggs to take home, and pulled great foxgloves for her, and made coronets of fern. We played at hide-and-go-seek among the beeches, and ran races, and fought visionary dragons. Then the sun went down over the trees, and she declared it was time to be going home. So I got my solitary fish from its bed of rushes and made her a present of it. She was pleased beyond measure, though she cried out at my hardness in taking its life.

So it came to pass that Mistress Marjory Veitch of Dawyck went home hugging a great two-pound trout, and I went off to Barns heedless of Master Porter and his heavy hand; and, arriving late, escaped a thrashing, and made a good meal of the remnants of supper.

CHAPTER II .- THE HOUSE OF BARNS.



HE house of Barns stands on a green knoll above the Tweed, half-way between the village of Stobo and the town of Peebles.
Tweed here is no great rolling river, but

a shallow, prattling stream; and just below the house it winds around a small islet, where I loved to go and fish. For it was an adventure to reach the place, since a treacherous pool lay not a yard below it. The dwelling was white and square, with a beacon-tower on the top, which once flashed the light from Neidpath to Drochil when the English came over the border. It had not been used for half a century, but a brasier still stood there, and a pile of rotten logs, grim mementoes of older feuds. This also was a haunt of mine, for jackdaws and owls built in the corners, and it was choice fun of a spring morning to search for eggs at the risk of my worthless life. The parks around stretched to Manor village on the one side, and nigh to the foot of the Lyne Water on the other. Manor Water as far as Posso belonged to us, and many a rare creel have I had out of its pleasant reaches. Behind rose the long, heathery hill of the Scrape, which is so great a hill that, while one side looks down on us, another overhangs the wood of Dawyck. Beyond that again Dollar Law and the wild fells which give birth to the Tweed, the Yarrow, and the Annan.

Within the house, by the great hall-fire, my father, William Burnet, spent his days. I mind well his great figure in the arm-chair, a mere wreck of a man, but great in his very ruin. He wore a hat, though he seldom went out, to mind him of the old days when he was so busy at hunting and harrying that he had never his head uncovered. His beard was streaked with gray, and his long nose, with a break in the middle (which is a mark

of our family), and bushy eyebrows gave him a fearsome look to a chance stranger. In his young days he had been extraordinarily handsome and active, and, if all tales be true, no better than he should have been. He was feared in those days for his great skill in night-expeditions—so much so that he won the name of 'the Howlet,' which never left him. These were the high days of our family, for my father was wont to ride to the Weaponshow with seven horsemen behind him; now we could scarce manage four. But in one of his night-rides his good-fortune failed him; for, being after no good on the hills above Megget one dark wintry night, he fell over the Bitch Craig, horse and all; and though he escaped with his life, he was lamed in both legs and condemned to the house for the rest of his days. Of a summer night he would come out to the lawn with two mighty sticks to support him, and looking to the Manor Water hills, would shake his fist at them as old enemies. In his later days he took kindly to theology and learning. both of which, in the person of Master Porter, dined at his table every day. I know not how my father, who was a man of much penetration, could have been deceived by this man, who had as much religion as an ox. As for learning, he had some ragtag scraps of Latin which were visited on me for my sins; but in eating he had no rival, and would consume beef and pastry and ale like a famished army. He preached every Sabbath in the little kirk of Lyne, below the Roman camp, and a woful service it was. I went regularly, by my father's orders, but I was the only one from the household of Barns. I fear that not even my attendance at his church brought me Master Porter's love; for I had acquired nearly as much Latin as he possessed himself, and vexed his spirit at lesson-hours with unanswerable questions. At other times, too, I would rouse him to the wildest anger by singing a profane song of my own making:

> O ken ye his Reverence Minister Tam, Wi' a heid like a stot and a face like a ram?

To me my father was more than kind. He was never tired of making plans for my future. he would say, 'you shall go to Glasgow College: for you have the makings of a scholar in you. Ay, and we'll make you a soldier, John; and a good, honest gentleman to fight for your king, as your forebears did before you.' (This was scarcely true, for there never yet was a Burnet who fought in the first instance for anything but his own hand.) Then he would be anxious about my martial training, and get down the foils to teach me a lesson. From this he would pass to tales of his own deeds, till the past would live before him, and his eye would glow with its old fire. Then he would forget his condition, and seek to show me how some parry was effected. There was but one result—his poor, weak legs would give way beneath him. Then I had to carry him to his bed swearing deeply at his infirmities and lamenting the changes of life.

In those days the Burnets were a poor familypoor and proud. My grandfather had added much to the lands by rapine and extortion-ill-gotten gains which could not last. He had been a man of violent nature, famed over all the south for his feats of horsemanship and swordsmanship. He died suddenly, of over-drinking, at the age of fifty-five, and now lies at the kirk of Lyne, beneath an effigy representing the angel Gabriel coming for his soul. The folk of the place seldom spoke of him, though my father upheld him as a man of true spirit who had an eve to the improvement of his house. Of the family before him I had the history at my finger-ends. This was a subject of which my father never tired; for he held that the genealogy of the Burnets was a thing of vastly greater importance than that of the kings of Rome or Judah. From the old days when we held Burnetland, in the parish of Broughton, and called ourselves of that Ilk, I had the unbroken history of the family in my memory. Ay, and also of the great house of Traquair, for my mother had been a Stewart; and, as my father often said, this was the only family in the country-side which could hope to rival us in antiquity or valour.

My father's brother Gilbert had married the heiress of a westland family, and with her had got the lands of Eaglesham, about the headwaters of the Cart. His son Gilbert, my cousin, was a tall lad some four years my senior, who on several occasions rode to visit us at Barns. He was of a handsome, soldierly appearance, and looked for an early commission in a Scots company. At first I admired him mightily, for he was skilful at all sports, rode like a moss-trooper, and could use his sword in an incomparable fashion. My father could never abide him, for he could not cease to tell of his own prowess, and my father was used to say that he loved no virtue better than modesty. Also, he angered every servant about the place by his hectoring, and one day so offended old Tam Todd that he flung a bucket at him, and threatened to duck him in the Tweed-which he doubtless would have done, old as he was, for he was a very Hercules of a man. This presented a nice problem to all concerned, and I know not which was the more put out, Tam or my father. Finally, it ended in the latter reading Gilbert a long and severe lecture, and then bidding Tam ask his pardon, seeing that the dignity of the family had to be sustained at any cost.

One other kinsman, though in a distant way, I must not omit to mention, for the day came when every man of our name felt proud to claim the kinship. This was Gilbert Burnet, of Edinburgh, afterwards Divinity Professor in Glasgow, Bishop of Salisbury, and the author of the famous Bishop Burnet's History of his Own Times. I met him often in after-days, and once, in London, he had me to his house and entertained me during my stay. Of him I shall have to tell hereafter, but now he was no more than a name to me—a name which my

father was fond of repeating when he wished to recall me to gravity.

Tam Todd, my father's grieve, who managed the lands about the house, deserves more than a passing word. He was about sixty years of age, stooped in the back, but had long arms and the strength of a giant. At one time he had fought for Gustavus, and might have risen high in the ranks had not a desperate desire to see his native land come upon him and driven him to slip off one night and take ship for Leith. He had come to Peebles, where my father met him, and, admiring his goodly stature, took him into his service, in which Tam soon became as expert at the breeding of sheep as ever he had been at the handling of a pike or musket. He was the best story-teller and the cunningest fisher in the place, full of quaint foreign words, French and Swedish and High Dutch, for the army of Gustavus had been made up of the riddlings of Europe. From him I learned to fence with the rapier, and a past-master he was, for my father told how, in his best days, he could never so much as look at Tam. Bon pied, bon wil, was ever his watchword, and I have proved it a good one; for, short though it be, if a man but follow it he may fear nothing. Also he taught me a thing which has been most useful to me, and which I will speak of again-the art of using the broadsword or claymore, as the wild Highlanders call it. My school was on the strip of green grass beside the Tweed, and there I have had many a tough encounter in the long summer nights. He made me stand with my back to the deep pool, that I might fear to step back; and thus I learned to keep my ground, a thing which he held to be of the essence of swordsmanship.

My nurse, Jean Morran, was the only woman body about the place. She and Tam did the cooking between them, for that worthy had learned the art gastronomical from a Frenchman whose life he saved, and who in gratitude taught him many excellent secrets for dishes, and stole ten crowns. She had minded me, and mended my clothes, and seen to my behaviour ever since my mother died of a fever when I was scarce two years old. Of my mother I remember nothing; but, if one may judge from my father's long grief and her portrait in the dining-hall, she had been a good and a gentle as well as a most beautiful woman. Jean, with her uncouth tongue and stern face, is still a clear figure in my memory. She was a kind nurse in the main, and if her temper was doubtful from many sore trials, her cakes and sugar were excellent salves to my wronged heart. She was above all things a famous housewife, keeping the place spotless and clean, so that when one entered the house of Barns there was always something fresh and cool in the very air.

But here I am at the end of my little gallery, for the place was bare of folk and the life a lonely one. Here I grew up amid the woods and hills and the clear air, with a great zest for all the

little excellences of my lot, and a tolerance of its drawbacks. By the time I had come to sixteen years I had swum in every pool in the Tweed for miles up and down, climbed every hill, fished in every burn, and ridden and fallen from every horse in my father's stable. I had been as far west as Tinto Hill and as far south as the Loch o' the Lowes. Nay, I had once been taken to Edinburgh in company with Tam, who bought me a noble fishing-rod, and showed me all the wondrous things to be seen. A band of soldiers passed down the High Street from the castle with a great clanking and jingling, and I saw my guide straighten up his back and keep time with his feet to their tread. All the way home, as I sat before him on the broad back of Maisie, he told me tales of his campaigns, some of them none too fit for a boy's ear; but he was carried away, and knew not what he was saying. This first put a taste for the profession of arms into my mind, which was assiduously fostered by my fencing lessons and the many martial tales I read. I found among my father's books the Chronicles of Froissart and a History of the Norman kings, both in the English, which I devoured by night and day. Then I had Tacitus and Livy, and in my fourteenth year I began the study of Greek with a master at Peebles. So that soon I had read most of the Iliad and all the Odyssey, and would go about repeating the long swinging lines. I think that story of the man who at the siege of some French town shouted a Homeric battle-piece most likely to be true, for with me the Greek had a like effect, and made me tramp many miles over the hills or ride the horses more hard than my father permitted.

Often I would take my books and go into the heart of the hills for days and nights. This my father scarce liked, but he never hindered me. It was glorious to kindle your fire in the neuk of a glen, broil your trout, and make your supper under the vault of the pure sky; sweet, too, at noonday to lie beside the well-head of some lonely burn, and think of many things that can never be set down and are scarce remembered. But these were but dreams, and this is not their chronicle; so it behoves me to shut my ear to vagrom memories.

To Dawyck I went the more often the older I grew. For Marjory Veitch had grown into a beautiful lissom girl, with the same old litheness of body and gaiety of spirit. She was my comrade in countless escapades, and though I have travelled the world since then, I never found a readier or a braver. But with the years she grew more maidenly, and I dared less to lead her into mad ventures. Nay, I, who had played with her in the woods, and fished and run with her as with some other lad, began to feel a foolish awe in her presence, and worshipped her from afar.

To her a great sorrow had come. For when she was scarce thirteen her father, the laird of Dawyck, who had been ever of a home-keeping nature, died from a fall while hunting on the brow of Scrape. He had been her childhood's companion, and she

mourned for him as sorely as ever human being mourned for another. Michael, her only brother, was far abroad in a regiment of the Scots French Guards, so she was left alone in the great house, with no other company than the servants and a cross-grained aunt, who heard but one word in twenty. For this reason I rode over the oftener to comfort her loneliness.

OUR CANAL POPULATION.

By ERNEST PROTHEROE.



OR years the voice as of one in the wilderness endeavoured to call public attention to the evil conditions under which the great majority of our canal boatmen and their families laboured. Though looked upon as

a more or less harmless crank by many, and in other quarters as meriting only obloquy and abuse, George Smith, the towing-path philanthropist, lived to see the passing of the Canal Boat Act in 1877, which embodied some of his cherished ideas for bettering the condition of some fifty thousand men, women, and children.

Before the passing of the act a state of things existed which one would scarce have thought possible in Christian England; and the statement that 'one half of the world does not know how the other half lives' applies even now with special force to matters connected with our network of canals, which in England and Wales alone have a mileage of over three thousand miles.

In the Black Country, and in other of our great industrial centres, the grimy, evil-looking waters are navigated by all sorts and conditions of boats, from the rough, open boats used for the conveyance of coal and minerals generally, to the trim, 'fly' cabin-boats of the great carrying companies, which are timed to travel forty miles per day.

When one meets a boat in pleasant country surroundings, the horse slowly jogging along and the boatman's 'missis' lazily presiding at the tiller, it may appear to the unobservant and unthinking as perhaps a happy-go-lucky, gipsy kind of existence, presenting sufficient charms to make a spell of boating not an altogether undesirable form of holiday-making. The prospect of inhabiting for a few days the toy-like cabin, with its miniature appurtenances, causes a smile of amusement and anticipatory pleasure; but the unfortunate 'boater,' who lives here with his wife and several children in considerably less space than is afforded by a third-class railway compartment, probably views the matter with less pleasurable emotions.

The probable bestowal of such a family for sleeping purposes was a problem we approached with considerable diffidence, and, after expending far more time and thought on the subject than would have been demanded by an average Chinese puzzle, we only arrived at a solution by direct inquiry. When we were told by an old boatman that in his time one child would have slept across the top of

the bed and another across the bottom, two would sleep under the bed, while yet two others would have sought Morpheus in a cupboard, leaving one to sleep on the table or elsewhere as best he could, our first thought was one of amusement; but there is a darker side to a question of this kind which can only engender pity for those who lived under such cribbed and cabined circumstances. It is a matter for congratulation that bad cases of overcrowding are now as much the exception as they were formerly the rule.

The cabins are not always only temporary homes used during ordinary voyages. In a large number of cases the cabin is the only home the boatman possesses. On this point we may quote the evidence of a witness before the Royal Commission on Labour in 1892: 'A narrow boat cabin has only 250 cubic feet of space for living, sickness, sleeping, cooking, washing, and dying, and all other incidents of family life, including confinements.'

We have personally verified a case recorded of a woman who had never slept in a house in her life, and had brought up no less than twenty-one children in a boat. Without encroaching on the space reserved for cargo, it was impossible for this brood to remain under the mother's wing indefinitely, and consequently after a certain point the latest arrival displaced the eldest, who was transferred to the towing-path to shift as he, or she, best could.

To 'swear like a boatman' is an unenviable distinction which the average member of the boating fraternity is popularly supposed to take some pains to maintain, for highly embellished figures—or shall we say disfigurements?—of speech occupy a large share of the ordinary workaday discourse. When a towing-line gets entangled with that of a passing boat, or when some attenuated specimen of horseflesh is left to wend his way unattended, and stops to graze while his master is aboard for the time being and cannot personally reach him, are occasions on which the 'boater' is apt to lose himself in the almost unfathomable depths of a mysterious and fearful vocabulary that would appal an habitue of Billingsgate.

Quite ninety per cent. of the adult boaters are almost utterly illiterate, and although there is an attempt to bring the canal children under the influence of the Elementary Education Act, it is a matter of extreme difficulty to give even a few days' consecutive teaching to those birds of

passage even when they are most willing to receive it, which is not by any means always the case.

Thanks to the Canal Boats Act, the registration and inspection of boats, and the efforts of numerous Boat Missions throughout the country, the whole tone of boating life is being raised very considerably. It is quite a pleasure to converse with some of the weather-stained, toil-worn old skippers, who, whatever their many failings, are simple-hearted and generous to a fault.

We recently encountered an old veteran who was accompanied on his voyages by two buxom granddaughters, while the 'old 'oman,' who was past boat-work, remained at home in a Black Country slum. One of the girls was in the habit of gathering discarded flower-roots thrown out of the gardens adjacent to the towing-path. These roots she would carefully tend in old meat-tins until she could transfer them to her 'grannie's bit of garden.' On one occasion the girl found what she surmised was a rose-tree. They were outward-bound, and the room required for the root was beyond the capabilities of a meattin; so she decided to plant it in a hedge. She related with glee how on later voyages she watched. and tended her treasure, only to find in due course that it was but an old brier-stock, as innocent of roses as a brier-pipe.

The water-gipsies' unions, when blessed with rite or ceremony, which is not always a sine qud non, are very often pure mariages de convenance. A young 'boater' notified his intention of being married at a church adjacent to a well-known canal-basin. The banns had been read a second time, when the prospective bridegroom waited upon the vicar and requested him to 'mek a change in the gel's name next Sunday,' as he proposed taking her sister instead. The explanation of the rigidity of the marriage laws rather staggered the simple

merman; and, after taking into consideration another three weeks' waiting, to say nothing of an additional fee, he in turn surprised the incumbent by philosophically instructing him to 'goo on wi' it; I reckon I'll hev to mek shift wi' the fust.'

Some stretches of canal are very difficult to work. Entering Wolverhampton from Stafford, no less than twenty-one locks have to be negotiated in a distance of about 2000 yards to overcome a rise of about 132 feet, this providing about one of the stiffest bits in our whole canal system. It is no uncommon sight to see a girl of nine or ten summers using all the strength of her little shoulders to open or close lock-gates weighing a couple of tons.

Sapperton Tunnel, on the Thames and Severn Canal, is 3808 yards long; Lappal Tunnel, near Birmingham, 3795 yards long; and the Dudley tunnel, 3172 yards long. These tunnels possess no towing-paths, and as the services of a horse are not available, the boats have to be 'legged' through. The process of legging consists in the men in the boat lying at full length on projecting boards called 'wings' and propelling the boat by well-timed and vigorous pushes with the feet against the side of the tunnel. The passage of Dudley Tunnel takes about three hours, and the special 'legger' whose services can be retained for a modest eighteenpence deserves every penny of his money.

It is a matter of extreme difficulty to ascertain definitely the wages paid to boatmen, but it is certain they are nothing like commensurate with the toil and hardships of the life. During various perambulations along the canal-side we found the boat-people a more than fairly satisfied class, looking upon a laborious life as essentially their lot, their contentment certainly not arising from the fact that they have so much as that their wants are few.

THE GURNARD ROCK.

By JAMES PATEY, Author of Jan Pengelly.

CHAPTER I.



IE story of the fight on the Gurnard Rock between Gabriel Lowry of St Budoe and John Tregenna of Porthillian, concerning which there has been much false rumour and surmise, is here told for the first time.

There was disturbance in St Budoc—tumults and alarms in the straggling street of the little fisher-town, skirmishes in the vicinity of the Compass Inu, and something like a pitched battle upon the beach. And all the trouble was about a torn fishing-net.

A Porthillian boat had fouled the drift-net of a St Budoc boat, doing considerable damage. It was pure accident, a shifting patch of fog temporarily obscuring the light of the stationary boat. But the St Budoc men denied the fog, and swore that the night was clear, as indeed it was save for the fugitive film that blotted out the boat; they attributed the injury to malice, and the affair was generally regarded as the latest symptom of the traditional feud between the two communities.

No man knows the beginning of the ancient enmity between St Budoc and Porthillian. In the forgotten past there may have been some profound cause for the antipathy; the unquestioning generations loyally carry on the quarrel.

Everything pertaining to Porthillian is malodorous in the postrils of St Budoc; and Porthillian regards its neighbour as the one blotch on the fair face of the county of Cornwall. When the bishop selected Porthillian for a brief holiday sojourn, the episcopacy fell grievously in the estimation of St Budoc; and when a Trinity yacht anchored off St Budoc and landed officials to inspect the coast for a new light, it was considered in Porthillian that the Elder Brethren had reached senility.

It was Saturday, and the turbulence had so far subsided that the men of St Budoc were resignedly mending the torn net upon the beach, and several Porthillian fishermen strolled unmolested through the town—one fellow's bandaged head had been badly cut by a sherd of crockery which a St Budoc dame had contributed to the controversy.

With great patience the men repaired the net, piecing and joining the multitudinous meshes; and beyond the little group on the beach shone the waters of the bay, flanked by jagged promon-

tories.

Nature is lavish with her colour in the Cornish seas; there are blues of every density, rich depths of purple where the seaweed floats, and margins of gleaming emerald where the clear water lies shallow upon the sand. The cliffs that half-frame the little bay of St Budoc are grand in contour, and the sea has worn their base into innumerable caverns, so that in places the precipitous rocks are fretted at the water-line like a stretch of punctured embroidery.

On the parapet of the little granite pier sat a girl darning a fisherman's blue guernsey. Now and again she would look up from her work and watch the group of men with a smile of scornful amusement. She was about twenty; wind and sun had given a glow to her cheek, half-red, half-brown, like the colour of a ripening hazel-nut; her hair shone blue-black in the summer light; her face was richly endowed with the gift of beauty, and she was evidently conscious of the endowment.

'You'm a fine, peaceful lot o' chaps,' she cried at length to the men; 'patient and peaceful as a passel o' women! Mending your net, quiet an' good, while they Porthillian fellows be marching

about like lords, smoking baccy,'

'Let the men bide, Miriam Roskree,' interposed an old woman who was cleaning fish on the steps of the pier; 'us have had trouble enough for wan week.'

'If I was a man,' continued the girl, heedless of the admonition, 'an' Porthillian fellows comed an' teared my net, I'd tear they. I reckon there'd be mending both sides. I'd limb 'em! Why don't they bide their own side o' the Point?'

'You'm a fulish maid,' said old Sam Polreggan, turning gravely to the girl. 'Porthillian men be as free to the bay as us be. You can't divide the channel up into salt-watter parishes.'

'Ripping nets is not fair fishing,' answered

"Bless the maid! What wid 'ee do?' retorted

Polreggan warmly.

'Take it peaceful, if I was an old gray man like thee, Mr Polreggan, and a chapel-steward.' Then she added with sudden vehemence, flinging her words towards the younger men, 'If 'twas my net I'd be quits with 'em—I'd sink their boats!' She had finished her darning, and she thrust her needle into the worsted ball with a vindictive stab.

'Shame upon'ee, Miriam!' gasped the old woman, looking open-mouthed at the girl, with a gaping expression not unlike that of the hake she was

gutting; 'you'm talking terrible.'

The girl laughed, and springing to her feet, descended the water-worn steps of the pier. She paused for a moment as she passed, and stretching the mended guernsey on her palm, said: 'There's a purty bit o' darning for 'ee, Mrs Chegwith.'

'Iss, 'tis good work enough,' assented the woman; 'but I'm feared you'll make more holes with your tongue than iver you'll mend with your

fingers!'

Miriam Roskree was walking away, when one of the men called derisively after her: 'You surely baint gwain yet! Haven't 'ee a few more warm

words to give us?'

The girl turned sharply, and cried back: 'Only this—when you valiant chaps meet a Porthillian boat, make way, and give 'em plenty of say-room; and whenever you see a Porthillian man ashore, mind your manners, and touch your caps respec'ful to your betters, for 'tis plain that the Porthillian fellows be kings o' land and say in these parts.'

As Miriam walked along the breakwater the eyes of one of the younger men furtively followed her;

and the man's heart went with his eyes.

Handsome enough in a swarthy way was Gabriel Lowry, tall and sinewy, with a touch of moroseness in his face. The girl's taunts fell on his sullen nature like sparks upon tinder; and beneath the tinder lay the gunpowder.

When the girl was out of hearing one of the men said: 'Her's got a sharp tongue—too sharp, to my mind. I reckon her's like the evil-teller in the Scriptur'; the pison o' wasps is under her

lips.

'The pison o' hasps,' corrected Polreggan.

'Hasps or wasps—what's the odds? The maid's a strife-stirrer,' said the fellow.

The smouldering Lowry became suddenly volcanic, and turning fiercely on the man, cried: 'Hold your tongue! If you say another word 'bout Miriam Roskree I'll heave 'ee in the watter!' And the threat was accompanied by an oath that was all the more emphatic from a man who seldom swore.

This outburst silenced all criticism of the vengeful Miriam, and the offender was cowed, to the

suppressed amusement of his comrades.

Presently Lowry flung down the tangled tow-line he was winding, and without a word walked away along the beach, his heels sinking deep into the sand with the angry vehemence of his tread.

'Bless my sawl!' ejaculated old Simon Trewarne, 'I didn't knaw the wind was in that quarter.'

'Wind, do 'ee call it?' answered Polreggan. 'Tis

a reg'lar hurricane. But 'tis the way of 'em—half the youngsters be mazed about that maid.'

'I knaw he was coortin' her back-along,' said Trewarne, 'but I heard they falled out.'

'So they did,' said Jacob Perran, working deftly with the net-cord, 'but I b'lieve they patched it up again, same as us be patching this purty job. They quarrelled about that painter-chap that was biding here. He was on the beach painting a pictur' o' the boats, and Miriam Roskree was a-setting 'ginst wan boat, pretending to be meshing a net-an' purty enough her looked in the pictur', I can tell 'eewhen up comes Gabe Lowry in a tearing rage, an' catched the gen'leman by the scruff o' the neck an' clane pitched 'en awver. "Paint your awn womenfolks," says he, "an' don't come here meddlin' with ours!" an' he snapped the painter-man's sticks across his knee an' thrawed the pictur' out upon the watter, an' away it floated on the ebb-tideboats, an' rocks, an' Miriam Roskree! An' the most coorious part, of it all is, that when Penruddock's boat comed in wi' the fish, an' the pictur' all watter-soaked aboard, on the top o' the mackerelfor Penruddock had a-picked 'en up-durn me if Lowry didn't turn sawft-hearted, an' he carried the pictur' up to the "Compass," where the gen'leman was biding, an' offered 'en a pocket o' money if he'd finish the figur' o' Miriam; but the painter widden' take the job. I reckon he'd had enough o' Gabe Lowry.'

'Aw, well! wan thing's sure,' said Mrs Chegwith, who had finished her fish. 'If they two sawls be iver in wan house, 'twill be like vire an' brimstone!'

Next day was Sunday, and the morning broke serenely, as a Sabbath should. Men who had looked picturesque and heroic all the week in their fishergarb became piously ridiculous in black coats of antiquated fashion and archaic top-hats. The boats were drawn up high upon the beach, and everything pertaining to the workaday avocations of the little town was religiously put away—that is, everything but the smell of the fish. This persistent perfume is as the invisible soul and spirit of St Budoc; it clings to everybody and everything; it pervades the streets and houses, and fills the water-side Methodist chapel like the odour of sanctity. If you thrust your head into the cuddy of a little, half-decked St Budoc boat, you will get in one supreme sniff a concentrated stench that will haunt the memory. And the natives profess to love it. It is said that an expatriated St Budocan will yearn for the old familiar smell as a Switzer pines for his mountains. An emigrant miner at the antipodes will, haply, show a thumbed and faded photograph of St Budoc, and indicating the pier with as much pride as an Athenian might point out the Acropolis, he will say: 'There! that's St Budoc! and there's the pier, and that's the end wall o' the chapel. All my folks be dead, but I sim I shall wan time go back wance more, for there's something 'bout St Budoc that draws the sawl of a man—I reckon 'tis the stink o' the fish!'

In the course of the ages two great missionaries have left their mark upon St Budoc. The first was the Breton saint, from whom the town takes its name, who preached the faith to the heathen Celts of the Cornish peninsula; the other, long centuries after, was John Wesley, whose followers half the population are.

On this particular Sunday morning, when all right-minded people were either climbing the hill in response to the six bells of Episcopacy or wending Methodistically chapel-ward, Gabriel Lowry, looking very unsabbatarian in the working garb of yesterday, with a profane, unshaven chin, was wandering about the town like a lion seeking prey. The taunts of Miriam Roskree had sunk into the man's heart and fermented there, until he had desperately resolved to fight out, single-handed if need be, this quarrel of the torn net with the men of Porthillian—not so much for hatred of Porthillian as for love of Miriam Roskree.

He was no drinking man; but those who did not - know the fellow might have taken him for quarrel-somely drunk, as he walked savagely along, a scowl upon his dark face and his hands clenched in anticipation of the encounter he was seeking.

The Porthillian boats had not left the bay on Saturday night; therefore it was certain that some of the men would be ashore for the morning service. There was no calculation in his wrath; one man, two men, three men, he would not count the odds, but would strike whenever he found the enemy.

Old Sam Polreggan, glorious but uncomfortable in a starched shirt-front, met him in the street and asked: 'Baint 'ee gwain to chapel this morning, Gabe?'

Lowry answered sullenly: 'Mind your awn business.'

"Tis my business,' rejoined Polreggan. 'When I see a young chap like thee trapesin' about on a Sunday morning looking like Satan, 'tis my business to speak to 'ee.' But Lowry strode on.

A few minutes later a stranger walked up the steps of the little Methodist chapel, and Gabriel Lowry intercepted him at the door. He was a yellow-bearded man, uncommonly handsome; he wore the blue guernsey and cap of the working week, and although he made no pretence to Sunday attire, he was scrupulously neat and clean.

Inside, the service had begun, and there arose the strains of the quaint hymn:

O brothers, let us arise and tell The glories of Immanuel!

with the feminine antiphon:

O sisters, let us arise and tell The mercies of Immanuel!

'Be you a Porthillian chap?' asked Lowry, standing rudely in the doorway.

'I'ss, I be!' answered the stranger simply.

'Then, take that from St Budoc!' shouted Lowry, striking the man heavily on the head.

The stranger reeled beneath the unexpected blow, and staggered down several steps. Then, recovering his balance, he stooped to pick up his cap, which was knocked off, and advanced towards Gabriel. The voices and the scuffle had been heard inside the building; and Polreggan, hymn-book in hand, appeared at the door, speedily followed by a score of men; and the singing, which had begun sonorously with treble and bass, dwindled to a feeble finish in the treble.

Polreggan took in the situation at a glance, and stepped between the two men, holding aloft the hymn-book with a gesture of adjuration.

'What's the man's name?' demanded the stranger, with more calmness than might have been expected under the provocation.

'Gabriel Lowry, at your service,' replied Lowry himself.

'And mine's Tregenna,' rejoined the other; 'John Tregenna of Porthillian. I was niver-reckoned a fightin' man, least of all a Sunday fighter, but when Monday comes, Gabriel Lowry, I'll teach thee Sunday manners.'

With these words, he walked into the chapel, where his presence during the remainder of the service excited more interest than the preacher.

The congregation was slow at dispersing that morning; it lingered on the chapel steps and stood in little groups in the street discussing the incident. The stranger, who had lifted a clear, tenor voice during the singing, had quietly left the chapel before the Benediction. The news of the scrimmage had been whispered from one to another at odd moments during the service, till everybody was more or less informed. While all deplored the Sabbath-breaking violence of Lowry, there were some who considered that a Porthillian man was beyond their sympathy.

'Lowry wid be peaceful enough if he was let bide,' said Jacob Trewarne; ''tis that maid o' Roskree's has a-set 'im on—'tis a cruel pity the fule hearkens to her.'

'Her's been spaking about sinking Porthillian

boats; but 'tis no fitty talk for a woman,' said old Simon Rodda.

'Aw, iss! 'tis all for pride o' St Budoc,' remarked Joe Kevern, lighting his pipe. 'Her gran'fer was just the same soort. I mind wan night he got his boat into a pickle in Bubbly Cove, an' a rope was thrawed to 'en; gran'fer Roskree calls out in the dark: "Who's t'other end o' this yer rope?" "'Tis Dick Sprague o' Porthillian!" and old Roskree dropped the rope like a hot cinder an' swimmed for his life. If a feller goes a-coortin' in sich a fiery family, he must expect to be set ablaze.'

So the blame of the quarrel was partially shifted from Gabriel Lowry to its instigator, Miriam Roskree; some of the younger women being very bitter in their condemnation.

'Come, come! us'll give the devil his due,' interposed Polreggan with some warmth; 'when Rebecca Trewhella died o' the fever, who tended they dree children? Was it thee, Mrs Penruddock; or thy wife, Joe Kevern? No, I reckon! When Doctor Pascoe said some woman must go out to Quayle an' nurse they children for the love o' God, not wan of 'ee stirred—the fear o' death was in the faces of 'ee; but Miriam Roskree tended 'em for a month, an' pulled 'em through the fever; an' here you all be casting reproaches at her.'

'Au' there's another thing us mustn't forget,' said old Mrs Trefusis. 'When Nance Carlyon's son was drownded, Miriam gived her a pig.'

'So her did!' assented Polreggan heartily. 'I mind 'twas a spotty pig, an' 'twas oncommon kind o' the maid. Iss, her's a bit of a spitfire, an' in many ways a weak vessel, an' not awver reg'lar at meetings; but 'tis my belief thicky pig will be accounted unto her for righteousness.'

'As for Gabe Lowry,' said old Trewarne, 'he was always a bit hot-headed; but us baint all made alike; some of us be the salt o' the earth, an' some of us, I reckon, be the pepper.'

So they dispersed to their homes, and told their neighbours the story of the encounter; and the tale grew as it travelled, till by nightfall it had assumed epic proportions, and was big with portent.

'THE RIDERS OF THE PLAINS'

THE CANADIAN MOUNTED POLICE.

BY ROGER POCOCK.



her Majesty's great triumph on the 22d of June 1897 all the cavalry of the empire were represented for the first time in London. And among the men who have fought on the frontiers for England, and who for the

first time came home, there was a detachment of the North-west Mounted Police. Their brilliant uniform had never before been seen in England, and the general public probably took them for Australians.

Considering the record of one of the finest cavalry regiments in her Majesty's service, it seems curious that it should be absolutely unknown beyond the limits of Canada.

To join the 'Riders of the Plains' you must be

of a girth and stature which Providence has withheld from most of the applicants; you must be able to speak French or English, read and write passably, and above all things show testimonials of good moral character. You may be a retired horse-thief, a starving tramp, a fugitive from the United States marshals, a broken-down gentleman, or a healthy young farm-lad from Eastern Canada; the letters testimonial may have been given by your friends and the clergy to get rid of you; but 'a good moral character' is indispensable. In my time a third of the crowd were broken-down gentlemen, many with titles or a purser's name; a third were Canadian bucolics; the rest promiscuous desperadoes, old soldiers, cowboys, sailors, and hellrake adventurers from all the ends of the earth. Not one of us had the least difficulty in proving our good moral character. The fact that all the lawlessness of the great plains would be enlisted sooner or later in the cause of law and order was the pride and glory of the corps. We made the life of bad citizens so very uncomfortable that sooner or later they joined us in despair.

Once on the strength of the force, given a regimental number, uncomfortably breaking innew clothes and boots, we were shoved into the awkward squad at headquarters to learn the goosestep. I remember that my chest expanded at the rate of an inch a week, because the life was perfect bliss, with three meals a day regular as clockwork—an astonishing experience after casual work, hard frontier life, and occasional starvation.

The pay begins at two shillings, rising every year till the fifth, when, if you are good, you can re-enlist at three shillings a day. About a third of the men get 7½d, a day extra for staff duties, and there is plenty of promotion even to commissioned rank. A shilling in the North-west Territories buys about as much as sixpence will at home; but so liberal is the provision of food and clothing that, beyond the laundry and the tobacco-pouch, there are few expenses. Six months of the year there are no temptations; out on the great plains money is useless except for playing cards; and so for at least three days after the monthly distribution of pay one feels like a millionaire.

Of course we grumbled at our hard fate—'growsing' was part of the fun; we were severely critical about every order given, rather looked down on the officers, were sometimes insubordinate, occasionally mutinous. Indeed, the Commissioner must have wept himself to sleep three nights a week over his woolly lambs, about as easy to govern as a shipload of pirates. He was rarely troubled with any malingering, skulking, or cowardice, his difficulty being to control our misdirected energies, and, without insulting us, to make it quite plain that he wanted us to behave like Christians. The civil population seemed to expect every morning that we had been out overnight and torn the whole country to pieces. I

doubt if we ever worked hard enough. Our saddle bronchos would buck themselves hoarse on the first day of a trip, hang their tails limp the second, and very likely die before the end; but I never knew hardship so great or times so desperate but some of us would fill up spare moments by misbehaviour.

However much we may have 'cursed the outfit' among ourselves and called it the last refuge of the destitute, the civilian who ventured to join in the chorus of disparagement probably got a black eye. As to any other military force in the empire, we only wanted an opportunity to compare notes. We were ready to outride, outdare, and thrash any regiment in her Majesty's service. That was ten years ago, when we numbered five hundred men -now there are eight hundred to take up the challenge. It is very difficult with a mere string of words to give the actual touch and taste and feel of that jolly headlong frontier life, as it was then and as it is to-day. It is a life that only the adventurer knows, the gentleman-adventurer of Kipling's Lost Legion, who helps to build big historical empires, and does it all for fun.

A scarlet regiment—that was to impress the Red Indians—we were technically mounted infantry. The uniform was like that of the Dragoon Guards, with a white canvas helmet instead of the 'tin hat,' a Winchester carbine, a belt of flaming-bright brass cartridges, and a foot-long service revolver instead of the cavalry sabre. The horse was a half-broken broncho raised under the shadow of the Rockies, a humorous beast, standing, say, fifteen hands, with all the vices and an artistic thoroughness in bucking. The saddle weighed forty pounds, and was of the Mexican type, high in horn and cantle, with broad-webbed cinchas instead of the English girth.

Apart from headquarters at Regina, which was only meant for the chastening of recruits, we numbered four troops, each with a tract like France to keep in order. If there were barracks, we built them and walled them round with a stockade commanded by two bastions on the alternate corners. Each troop had the duties of an army corps—cavalry, infantry, artillery of old brass seven-pounders, transport, commissariat, hospital, jail, with the flag over all as a reminder. In the morning the work was to shovel coal or make a water-colour sketch for the officer commanding; in the afternoon, to exercise horses, shovel snow, or paint a barrack-room. On Monday one would drive a wagon; on Tuesday, wash dishes for the cook; on Wednesday, clean stables; on Thursday, drill; on Friday, mount regimental guard, escort prisoners, and spend most of the night pacifying horse-fights, making a round of the barrack stoves, and taking temperature-readings on flying sentry.

That was a sample of winter duty in barracks when the midnight thermometer stood at fifty degrees to sixty-five degrees below zero, or refused duty altogether on account of the cold. Even in

the depth of the wonderful, delightful winter, when the air made one drunk, and running a couple of miles meant scarcely an effort, there was an occasional trip on duty. The uniform then was a black fur cap, a short buffalo-coat—now changed to bearskin because the bison is gone the way of all flesh -long stockings, deerskin shoes, called moccasins, and mittens or fingerless gloves. A light hard-wood sledge was used for travelling the jumper; but woe to the idiot lazy enough to spend the day in it! One must trot alongside until every finger tingled with warmth before it was safe to rest. There was more than frost-bite to fear - the chilling of the brain and of vital organs, delirium, coma, death! Even recovery from the brain-chill was a sorrowful tragedy enough—the intellect unbalanced, the head drooped, a languor lasting through months or even a year or two, which took away all ambition, virility, and active manhood. But death? Well, we were very hard to kill, and I only know of one case when the searchers came too late.

The winter is terribly beautiful when the immeasurable spaces of the plains lie glistening under the moonlight; when the red sun rolls up over the edge of the world and the steel-blue mists flush like the petals of a wild rose; in the infernal, bewildering horror of the blizzard; in the death-hush of the evening; or when the Northern Lights march blazing up the heavens like legions upon legions of armed angels.

Spring was displeasing, because the sun sends up a damp heat from the snow which causes blindness, with a great deal of pain worse than toothache. Also there were the setting-up drills, when we had to wear uniform and play at soldiers for a whole month, probably because the officer commanding wanted to make himself detestable. We always put down the drills to his personal spite.

But then came the summer, which was too good to talk about. We were scattered out on the plains, visiting the Indian Reserves, chasing horse-thieves, patrolling the nine hundred miles of the United States boundary—a life of hard work, hot, dusty trails, lonely outposts; of bathing, hunting, growling viciously; of tents and bivotac, riotous rows in the villages, and all the fun in the world. There was no soldiering; save for the clipped tails of the horses, the police outfit made us look like a party of wandering cowboys or desperadoes. We were brown as Indiaus, dusty, hungry, thirsty, dressed anyhow in the frontier clothes which put civilised gear to shame, because they are beautiful.

To keep the country in order? Why, we caused more trouble than the twenty-three thousand Indians and the twenty odd thousand settlers put together! But getting into trouble was our privilege, our monopoly; nobody else was allowed to misbehave—we saw to it. The Great Plains, nine hundred miles by five hundred, a country as big as Western Europe, was kept as peaceable as an English country parish. No civilian carried arms for self-defence, because if the law was broken the

fugitive was hunted down, if it took months. Ho might fly to the northern forest; but he would be tracked and delivered in serviceable condition for the common use as a jail-bird. Once, when some criminals took refuge in the United States, they were followed, in defiance of law and treaty, for one hundred and sixty miles into Montana, to be turned into jail-birds without the great American nation being any the wiser. There is but one thing on this planet longer than the equator, and that is the arm of British justice.

Once only we failed to keep the mastery of the plains. Under one Louis Riel, a religious monomaniac who claimed divine attributes, the French Canadian half-breeds, the old voyageurs of the furtrade, led half the Red Indian tribes to war against us. The campaign was long and bloody; indeed, all the power of Canada had to be brought to our aid; but in face of overwhelming numbers the insurrection was stamped out, the leader judiciously hanged, and the peace restored. Apart from that lapse from virtue the force is without a history; only disorder makes history-books.

I have never seen any body of men so thoroughly •alive as the mounted police. Big Bear, last of the rebel chiefs, had just been taken single-handed by Constable 'Sligo' Kerr, and his hundred and eighty pursuers were coming down out of the northern forest. There for weeks they had kept themselves alive by hunting rabbits, many of the horses had starved to death, and the whole crowd seemed worn out, hopelessly discouraged. Suddenly it occurred to somebody in the ranks that this was the 24th of May. 'Queen's birthday!' he yelled, flinging his slouch-hat in the air. A man behind him drew his revolver and fired, so down came the hat with a bullet-hole in the crown. Every hat went up, all came down riddled, then the fusillade was drowned in a volley of cheering, and that in turn by the National Anthem. Many a time have I known the advance-guard to start a song, the wagons to take up the chorus, the rear-guard to join in behind, until the plains rang with music. In camp and barracks it was the same—the song, the chorus, the riotous fight with belts. There was a total prohibition of liquor throughout the territories, by which it became incumbent upon the force to drink or destroy all liquor, lest the Indian tribes and the civil population should be demoralised. But our ambitions were not confined to noise or liquor. One man would farm pigs, another trade in cigars, a third edit the local paper, and a fourth add to his pay by making water-colour sketches for the rest.

Arrests of criminals are often complicated and exciting. Some years ago Deerfoot, a well-known Indian athlete, was wanted for killing people, but resisted arrest, defying three constables with an axe. A constable is not allowed to bring in prisoners dead, that being contrary to a regimental order on the subject, and punishable with three months in the guard-room. Deerfoot was allowed to escape,

and that also is punishable with three months' imprisonment.

Some time after, an interpreter attached to the force, camping over-night at a trader's cabin, was told that Deerfoot had set up his lodge in a meadow close by. The Indians had, indeed, shown a poster to the trader advertising him, Deerfoot, alias Dried Meat, to run in the skating-rink at Calgary. Next morning the interpreter walked over to the lodge, watched the young Indian running to drive in the ponies for travel, compared him with a photograph of the man wanted, called him up, and arrested him. The Indian dodged out of his blanket, broke away, yelled to his squaw, who fetched out his rifle from the tepce (tent), and gained the abrupt bank of a rivulet close by. Meanwhile the interpreter had fired once, seemingly without 'reaching his meat.' On the top of the bank the Indian danced his little war-dance, prayed to his gods, took cover, and levelled his rifle. When the white man charged up the bank the Indian ran. He ran two miles, going to cover at last in a farmhouse, where he sat down by the stove. Until he actually entered the house the interpreter never guessed that this Indian who had beaten him in a two-mile race was desperately wounded in the thigh. Curiously enough, this was not the man who was wanted for murder. It transpired that there were two Indian runners named Deerfoot, of the same age and stature, the one called 'Dried Meat,' the other called 'Putrid Dried Meat.' The prisoner was pensioned for life.

On May 31, 1897, a report came from Duck Lake, in Saskatchewan, that an Indian, whose name was 'Almighty Voice,' had shot a non-commissioned officer named Bowringe, from ambush, and also a settler named Venne, who was brought to the Duck Lake detachment station wounded in the shoulder. Next morning the detachment located 'Almighty Voice' in a bunch of timber, where he was aided and abetted by other Indians. In the dispute which followed, Constable Kerr and a volunteer named Guadry were killed, Corporal Hocking mortally wounded, Inspector Allen and Surgeon Raven wounded, and one Indian killed. A field-gun being sent for, the occupants of the timber were severely incommoded, 'Almighty Voice' and another Indian being killed.

One night recite for hours the various adventures of the frontier patrol along the United States border, the nine hundred miles of which are traversed once a week; or tell wonderful stories of the detachment, two thousand miles to the northward, which protects the Yukon gold-diggings on the border of Alaska. The last news thence was that a city, exclusively inhabited by American desperadoes, had invaded Canada, was preparing to

attack the diggings, and at the time the mailcarrier left had the confident expectation of 'wiping out' both mounted police and Canadian miners.

From Manitoba to the Rocky Mountains, from the Montana border to the Arctic, the British peace is in the hands of that grand cavalry. The records of the force ever since 1873, when it was founded, have been one long roll of impossibilities made facts, heroic adventures, great tragedies. But a man has never been lynched, a murderer has never known a moment of safety, justice has never been sold, nor has any injustice been done to the Indian tribes. The greatest boast of the force is, that it is scarcely ever mentioned in the newspapers.

Of my old comrades, A. died in poverty, D. in an English workhouse, E. of fever, K. deserted, M. broke his neck when his horse stumbled, J. went mad, W. shot himself, O. was last seen as a tramp, P. died of starvation, and L. was frozen to death. If the rest are scattered all over the world, this magazine may reach them sooner or later. To them—regards!

Three of us, Corporal John Donkin, author of Trooper and Redskin; Corporal John Mackie, author of The Devil's Playground, Sinners Twain, and They that Sit in Darkness; and myself, began in leisure moments to write down the things we saw. Donkin is dead, but Mackie and I are busy novelists now. My first sketch of this life appeared in Chambers.

The life of the force was a gorgeous romance, but it had its shadows. Men got bored and deserted, say one-tenth in the year; or, brooding over all that they had lost-love, hope, ambition, honourthey would go away quietly into a corner and blow their brains out. The death-rate was always high, especially from typhoid-malaria, caused by bad sanitation in barracks; a number of men were killed on duty; others again met their end by fall from a horse or other misadventure on the plains. The very life was unsettling; men could not leave it and settle down to any monotony of clerical work or farming, because adventurers are not built that way. The tamest and quietest of us have bad spells when the blood runs wild for the old freedom, when there is no peace by day, no sleep night after night; when one must be in the saddle again, or off to sea, or away to some mining rush; war, exploration, anywhere beyond the fences, out on the frontier.

One hears again the dip of the paddles, the click of the trigger, the roar of the surf, the thunder of horses. Is there any Englishman who will blame us for making empires?

[Was this prophetic? Mr Pocock had disappeared, in the direction of Alaska it was believed when wanted to correct this proof.]

AN EPISODE.

By DAVID LAWSON JOHNSTONE, Author of The Rebel Commodore, &c.



HS is a charming spot—for two,' he said, settling himself comfortably at her feet.

'We are lucky to find it unoccupied,' she said, 'especially at one of Mrs Gurdon's garden-

parties. She will be pleased. I don't believe there is a square inch of the lawn to be seen.'

'The whole world is here. I know, Miss Lindsny; I have shaken hands with it.'

'It is one of the penalties of being a great author.'

'Or of being notorious?'

'You are too modest, Mr Holland. Have you not shared the honours of the afternoon with the Prince and the latest lion—just imported from South Africa, was it not?'

'And felt like a martyr all the time. But there you have the proof, Miss Lindsay. Don't think I am complaining. Fame and notoriety mean the same—in London. And in this '—he indicated the screen of shrubbery which cut off the little nook from the rest of the garden, but did not shut out the strains of the Blue Hungarians or the hum of many voices—'in this I have my reward. I forgive the lion-hunters.'

'It is a relief to be out of it,' she admitted. 'Do you know, Mr Holland, that these nooks—yes, there are more of them—are a pet idea of Mrs Gurdon's?'

'I must thank her. She is a woman of genius.'

She laughed merrily, 'Oh no! she is only an incorrigible match-maker—and finds them useful.'

'So she, at least, believes in love?' he asked, picking up the thread of a former conversation.

'Or in marriage. It is not always the same thing, is it?'

'It should be,' he replied, with an air of the deepest conviction. He was looking up into her eyes.

'What does somebody say?—that in woman love is a disease; in man it is an episode.'

'I seem to recollect that,' he said. 'But it is nonsense; love cannot be summed up in an epigram.'

Again she laughed. 'I am afraid you have a very bad memory, Mr Holland. Is it another of the penalties of—notoriety?'

'În my case I am afraid so. Is Meredith the culprit?'

i'I must leave that to your conscience, sir. The sentiment appears in a brilliant study of society, entitled *Providence and Mrs Grandy*, for which, if the title-page is to be trusted '——

'Ah! I remember now. Please spare me, Miss Lindsay. You don't know the evil effects of phrasemaking—it saps a man's morals until he has not even a nodding acquaintance with the truth. And you have taken your revenge.' 'But, really, Mr Holland, I trusted to your—your knowledge of human nature, shall I say? I was glad, for my own sake'——

'For what, if I may ask?'

That, "in man it was an episode." It makes life so much easier to believe so.'

'You will let me retract in sackcloth and ashes, Miss Lindsay? Honestly, I have some reason to do so. It is three years since I wrote that miserable book. Can you not guess my excuse?'

'It seems to infer a compliment—somewhere,' she said, rather doubtfully.

'I am very much in earnest,' he said, getting up and standing above her; and he looked it. 'I didn't know you then. If I had, the thing—call it an epigram if you like—would never have been written. How could it, when—?'

Here the bushes were parted, and a face—a tanned, handsome, open face it was, albeit just now the expression was not too pleasant—showed in the interstices. Miss Lindsay nodded brightly.

'Come in, Ralph,' she said.

'Very sorry, I'm sure,' said the new-comer. 'I didn't know, Nell'—— Then he disappeared.

Miss Lindsay smiled.

'Captain Havelock seems—out of sorts,' remarked her companion, sitting down again.

'Probably he is looking for my mother,' said she. 'I told him to attend to her.'

'He is a capital fellow,' he said indifferently.
'Done something in India, hasn't he?'

'A small affair of outposts,' she replied, in the same tone. Only, perhaps, it was as well that he was not studying her eyes very intently at that moment. 'He held a fort somewhere on the frontier for a fortnight against a couple of thousand tribesmen, with only a European sergeant and fifty Sikhs under him; and he was reduced to thirty rounds of ammunition and no provisions before he was relieved. It is quite a common thing out there. He told me so himself.'

'He is modest—as well as lucky,' said Holland.
'You and he are old friends, Miss Lindsay?'

'We were brought up together.'

'Like brother and sister?'

'Exactly. We quarrel quite as much, at least,'

'And make it up, I dare say? But I am sure the quarrels are not serious. Apropos, am I forgiven?'

'Was there a crime, Mr Holland? Really, I have forgotten.'

'We were discussing'

'George Meredith, was it not?'

'Then I am not forgiven for that unfortunate fault of my youth? You are very hard, Miss Lindsay. You have taught me the error of my ways, and yet you refuse to credit the conversion! How can I convince you? I am quite serious'—

'Oh! I hope not,' she said. 'It is too warm for anything but frivolity.' He reddened a little, and nervously plucked the grass round him. Miss Lindsay watched him with some curiosity out of the corners of her eyes: the symptoms were not unknown to her. 'There is a green thing on your coat, Mr Holland,' she went on.

'Thanks.' He flicked the insect off. 'I have something to say, Miss Lindsay—a kind of confession. It is stupid; but I don't quite know how to say it.'

'Is it necessary?' she asked innocently. 'I don't like confessions, Mr Holland. We are Low Church

people.'

'It means a lot to me,' he continued, and again there was silence. Then he rose for the second time, perhaps feeling that an upright position conduces to a proper dignity.

She perceived her opening, and rose also. 'It is time we were returning,' she remarked.

'Don't go just yet, Miss Lindsay,' he pleaded, putting out a hand to detain her. 'I want you to listen to me for a moment. I won't keep you if'——

But already she was half-hidden by the shrubbery, and her only answer was a bewildering smile. He had perforce to follow.

'It seems more crowded than ever,' she said as they picked their way through the throng. 'Ah! there are my mother and Captain Havelock. Shall we join them?—I hope you are attending to your duties, Ralph? Mr Holland and I have been discussing Meredith—and things. Tired, mother? Oh! you must be, Mr Holland, will you find my mother a seat somewhere—near the band, if you can? The Hungarians are so good.'

'Delighted,' he replied. Then lower: 'I may see you again before you go, Miss Lindsay?'

'If you can,' she repeated.

She watched them until they were lost in the crowd, and then deliberately led Captain Havelock back to the little nook. Some girls have no originality. But it was still empty.

'Better sit down, Ralph,' she said, taking her old place.

'Thanks; I prefer to stand,' he said stiffly.

'It is a matter of taste—or of comfort.' She gave him a swift glance. 'Not up to Simla, is it?'

'I'm sick of it. Beastly pack. I haven't had a chance of speaking to you all afternoon, Nell.'

'Philanthropy is its own reward,' she said.

'It's not that—Mrs Lindsay is all right. But there's that scribbling fellow who's always dangling after you.'

'He is very amusing—and clever.'

'Is he? He doesn't know one end of a gun from the other, and I suppose he thinks that horses were invented to drag the Chelsea 'bus—or wherever he stays.'

'Why, dear boy, to be a groom is not man's chief end. And you are very rude. Mr Holland speaks wery nicely of you.'

'Confound his impudence !' and, by way of relief,

he proceeded to kick a hole in Mrs Gurdon's turf. 'Look here, Nell,' he said presently; 'I'm going off to Egypt.'

'Indeed! I thought winter was the proper season. Won't it be rather warm there just now?'

'That is, if they'll have me,' he continued, paying no heed. 'I've volunteered for Dongola. Kitchener is going up to Khartoum in the autumn—at least I hope so.'

'In Cook's boats? What fun!'

'It will be—for Fuzzy and the dervishes. But you might have the decency to say you are sorry, Nell. I mayn't come back, you know.'

'So that is why you told me?' she asked. 'Don't you think it is rather crude, Captain Havelock?' But she was not looking at him, being engaged in tracing fancy patterns on the grass. Not that it would have mattered; for he, on his part, was also regarding the point of the sunshade with apparent interest.

'Oh, I dare say that writing chap would have done it better,' he said savagely. 'It's his trade. I suppose you mean to marry the beggar, Nell?'

'His name is Holland,' she suggested.

'I know that. You can see his portrait in any illustrated paper for a sixpence. It's in them all.'

'Which is really no reason why he shouldn't be addressed properly, is it? I have some idea that I have seen another portrait in the same places, with the letters D.S.O. after the name.'

'You need not get nasty. Besides, you haven't told me yet if you are engaged to him.'

'Well, you see'—here she ventured another glance—'he hasn't asked me yet.'

'I suppose you will marry him, though,' he persisted. 'It's natural enough, perhaps—he's a genius and all that—and of course I'm not. Wait a minute, Nell! I can't stand this any longer, and I'm bound to have it out for good. You were always cleverer than I was; but you know what I've wished for ever since I was an unlicked cub at Eton, I wasn't afraid to tell you then. You remember, Nell?'

'I remember thinking that those lickings—which you did not get—might have done you good.'

'Well, you didn't say so! And all the time I was stewing in India it was the same; and when I was down with fever in the plains I kept shouting one name—so the doctor told me.'

'It was in very bad taste,' she murmured.

'Oh! Then that fort on the frontier, with the Waziris howling round—and not five minutes' sleep on end for fear they should rush us—and the grub running out—and the only idea in my head was to see it through somehow, and get home to ask you to marry me! There, Nell, it's out at last!'

She was looking at him now, but there was a world of reproach—and perhaps something else—in her eyes. 'You haven't asked me yet!' she cried.

'But, Nell—good heavens!—you don't mean to

And then—well, in some mysterious fashion he

managed to gain possession of her hands, and to say the rest without words. As for her:

'You might have seen it, you foolish boy!' she

And that was all.

Except that, a little later, she met Mr Holland.

'I have been looking for you, Miss Lindsay,' he said; 'I had something to say. Not going already,

surely? I may call to-night, then? I need not tell you what it is—perhaps you can guess—I—I hope so.'

'I think it would be better not to come, Mr Holland,' she replied, giving him her hand. 'I am sorry, but—will you oblige me by considering the episode as closed? I am engaged to Captain Havelock.'

UNCLAIMED FORTUNES.

By Sydney H. Preston.



EW people would imagine that news of very considerable windfalls is occasionally to be gleaned from what is generally supposed to be the driest of dry reading—parliamentary returns. Yet remarkable facts and

figures relating to hidden wealth are annually to be found in such official papers, and during the parliamentary session just closed some interesting particulars have come to light.

Funds in Chancery.—The receipts and transfers into the Supreme Coart of Judicature (England) during the year ended 29th February 1896 were £15,383,257, 1s. 1d. This sum, added to the balance in hand on 1st March 1895, makes a grand total of £76,768,417, 3s. 5d. After payments out of court to successful claimants and others, amounting to £17,035,648, 14s. 10d., there remained in hand, in cash and securities, on 29th February 1896, the large balance of £59,732,768, 8s. 7d., exclusive of a large item under the head of 'Foreign Currencies.' The proportion of this balance which may be classed as 'unclaimed' is not stated, but no less than £2,327,822, 13s. 5d. has been appropriated, in the absence of claimants, to various objects. The Consolidated Fund is liable in respect of this appropriation in the event of legitimate heirs at any time substantiating their claims. The number of suitors' accounts is 49,924, of which some 5000 relate to funds unclaimed between 1720 and 1877.

The funds in the Supreme Court of Judicature (Ireland) on 30th September 1896 were £5,381,213, 4s. 8d. In the Chancery Division there is a large sum of unclaimed money, but the exact amount is not stated. More than £250,000, part of such unclaimed funds, has been appropriated towards the cost of building the Law Courts and Law Library in Dublin,

Unclaimed Dividends on Government Stocks.—The dividends due and not demanded on 2nd April 1896 were £288,545, 2s, 8d.; on 2rd July, £276,374, 12s. 6d.; on 2nd October, £288,986, 10s. 6d.; and on 2nd January last, £265,303, 0s. 7d. The greater portion of these sums were advanced to the government, pursuant to Act of Parliament, till claimants appear. The total amount of accumulated unclaimed government stock and dividends is about £5,000,000.

Unclaimed Dividends (Bankruptcy).—The Consolidated Fund is liable in respect of a sum of £1,141,319, 2s. 6d., part of the unclaimed money arising from bankrupts' estates. The Exchequer is also liable for the sum of £39,787, 12s. 5d., interest on South Sea Stock, paid over to the government between the years 1845-52.

Estates reverting to the Crown.—Intestates' estates in England, of the value of £47,654, 19s. 4d., fell to the Crown during 1896 in the absence of heirs or by reason of illegitimacy. The balances in hand at the commencement of the year were £125,275, 15s. 8d., and, after payment of the Crown's share of estates, grants to next-of-kin, &c., the balances on 31st December last were £119,397, 8s. 3d. A similar return relating to intestates' estates in Scotland shows that on the same date the Queen's Remembrancer had balances in hand amounting to £40,316, 11s. 3d.

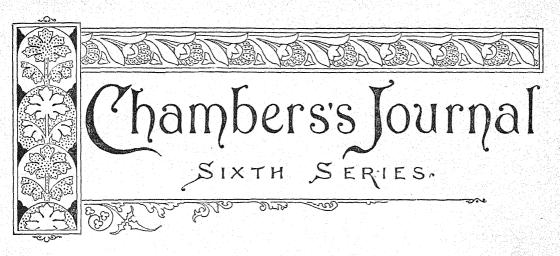
Army Prize-Money.—The balance of unclaimed army prize-money in hand on 31st March 1896 was £77,138, 9s. It is interesting to note that during the preceding year only £13, 7s. 5d. was paid to soldiers or their representatives, while £1620, 19s. 2d. was utilised towards the maintenance of Chelsea Hospital and grounds.

Soldiers' Unclaimed Balances.—The unclaimed effects of soldiers, accumulated since 1863, has reached £140,848, 1s. 3d. This fund has been transferred to the Patriotic Fund Commissioners.

Naval Prize-Money.—The unclaimed naval prizemoney due to sailors or their representatives on 31st March 1897 was £261,958, 16s. 10d. There are also considerable sums in hand arising from unclaimed wages and effects of deceased seamen.

Unclaimed Bank Deposits.—Mr J. E. Gordon, M.P., suggested the advantage of such legislation as would grant to the State custody of unclaimed funds now in the hands of bankers and others; but the Chancellor of the Exchequer regretted that he could not undertake to deal with the matter in the manner suggested.

Other returns might be noticed, but the foregoing jottings seem to be sufficient to justify the publication of an annual list of all unclaimed funds in government departments. Such a return would certainly be more widely read than most of the parliamentary papers at present issued.



THE FATE OF SIR WALTER SCOTT'S MANUSCRIPTS.

PART I.



ORD TENNYSON once said, 'I would have given anything to have seen Sir Walter Scot.' To him 'he was the most chivalrous literary figure of this century, and the author with the widest range since

Shakespeare.'

Many of us who might also like to have seen him must rest content with his works, or a sight of his manuscript. It is not easy to measure the prodigious literary activity of Sir Walter Scott, for he flung off letters, poems, essays, review articles, and his matchless novels with marvellous ease and felicity, and his flowing, lawyer-trained handwriting betrays wonderfully few corrections and interlineations. Of his manuscripts, of which over fifty were on view at the Scott Centenary Exhibition in Edinburgh in 1871, whole pages of the novels might be seen without one change. In the case of Scott, writing was begun at first as a labour of love; byand-by it became a necessity of his nature, then an additional necessity when he was plunged into his own and the financial difficulties of others; and there is no braver story in literature than that of the heroic efforts he made to remove a mountain of debt, with failing powers and a tired and worn-out brain. 'After all,' he said to his friend Morritt in the heyday of his reputation, 'scribbling is an odd propensity. I don't believe there is any ointment, even that of the Edinburgh Review, which can cure the infected.' An edition of his entire works issued in 1871 occupied a hundred volumes. That meant much toil and the covering of an immense amount of manuscript either by his own hand or through dictation by the hand of an amanuensis. manuscripts are in manageable bulk, but the weight of the stereotype plates from which one edition of his works was printed was twenty-eight tons.

One gazes with wonder at any one of the manuscript volumes left by Scott, which the printing-press has multiplied beyond all hope of reckoning. For instance, three million volumes alone of one of the cheaper issues were sold between 1851 and 1890.

This was through Messrs A. & C. Black. Robert Cadell, who held the copyrights for the twenty years previously, sold at least two million volumes. Of the people's editions of the writings, in weekly sheets, over eight millions of sheets were printed during the same period. Constable, their first publisher, had also done well with the dearer form. Now various publishing houses have vied with each other in reprinting them. Who can estimate the widespread pleasure and profit from the perusal of these writings? Scott in this respect has been, and is still, a great benefactor, not to speak of the army of papermakers, printers, and bookbinders to whom he has given employment.

There is no evidence that Sir Walter himself set any value on his manuscripts; at least, he never showed the slightest desire to retain them in his own possession. Although, like Mr Gladstone's post-cards, Scott manuscript is plentiful, yet when it changes hands it steadily rises in value. For instance, Old Mortality, which Tennyson thought his greatest novel, and for which Cadell paid £33, was sold at Sotheby's in June 1897 for £600; while the Lady of the Lake, which brought 264 guineas at Cadell's sale, again changed hands at the same time for £1290. This manuscript is all in the author's own hand, and exactly in the condition in which it was sent to the printer. Old Mortality had been bought by F. Richardson from Mrs W. J. Paton, a daughter of R. Cadell. Rob Roy, presented to Lockhart by Cadell, was sold about three years ago to Mr William Law for £600. It seems a misfortune that Scott's manuscripts have been scattered to the four winds of heaven. A room in the Scott Monument, Edinburgh, or at Abbotsford, would have been a suitable abiding-place for them.

When the authorship of the novels was being jealously kept, the usual proceeding on Scott's part was to hand over his tales as written to James Ballantyne, who had them copied for press. The popularity of *Marmion* led Constable to ask Ballantyne to preserve all future manuscripts. Although Scott used an amanuensis freely, yet much of his

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best writing was done by his own hand, in the early morning, in his 'den' at 39 Castle Street, at Ashestiel, or his study at Abbotsford. In addition to authorship he had always a heavy letter-bag—a considerable tax on his good-nature, purse, and patience.

After seeing the small parlour, some twelve feet deep by eleven wide, with its single window, on the north side of the ground-floor at Ashestiel, the home of Scott when he wrote, it was presumed, the greater part of the Lay of the Last Minstrel, Marmion, Lady of the Lake, and began Waverley, John Ruskin concluded that a small chamber, 'with a fair world outside: such are the conditions, as far as I know or can gather, of all greatest and best mental work.' We fancy everything depends upon the kind of man you have got within the small chamber.

Miss Russell of Ashestiel afterwards corrected this statement of Ruskin's. It appears that the small study here described was a storeroom in Scott's time, and that the quaint, old-fashioned room on the east side of the entrance-porch, with one window, was his writing-room, while he kept his books upstairs in his dressing-room. When occupied by Scott it had two additional windows, one on each side of the fireplace, from which the Tweed was visible. His greyhounds, Douglas and Percy, were always going in and out of these windows while he was busy with Marmion. For this, and all the Scott localities, the reader is recommended to consult that beautiful volume, the Haunts and Homes of Scott, by Mr G. G. Napier, or Mrs Maxwell-Scott's Abbotsford.

But much more was written by Scott in his 'den' at 39 Castle Street, a square, small room behind his dining-room. It had a single Venetian window, opening on a very small patch of turf; and according to Lockhart, the aspect of the place was rather 'sombrous.' The walls were elad with books, systematically arranged; the volumes for immediate reference lay on a small movable frame. The massive writing - table was constructed after the pattern of one at Rokeby, with a desk on either side, at one of which he worked, his amanuensis being opposite. It had small tiers of drawers reaching all round to the floor. Session papers lay on the top; and on the desk, besides the manuscript at which he might be writing, lay parcels of letters and proof-sheets, neatly done up in red tape. His writing apparatus was an old box, richly carved, lined with crimson velvet, with ink-bottle and taper-stand in silver, all in perfect order, as Dickens liked his table and room to be. Lockhart recalls, when at a gathering of young men in George Street in a room overlooking Scott's study, how the sight of 'that confounded hand,' as Scott filled page after page, kept the host from enjoying himself. 'I have been watching it,' he said; 'it fascinates my eye—it never stops; page after page is finished and thrown on that heap of MS., and still it goes on unmoved, and so it will be until candles are brought in, and God knows how long after that.'

His study at Abbotsford with its private entrance will be familiar to most people. His usual habits were to rise at 5 A.M., light his own fire when it was required, and shave and dress with care and precision. Arrayed in a shooting-jacket, or whatever garment he meant to use for the day, he would be at his desk by 6 A.M., with all his papers arranged before him in accurate order, and his books of reference ready on the floor. Such were the conditions and surroundings of Scott when much of his best work was done.

Sir Walter, then on terms of the greatest friendliness with Constable, presented him on 10th March 1823 with thirteen volumes of the original manuscripts of all his works then in his possession. Scott's letter ran as follows:

'CASTLE STREET, 10th March 1823.

'Dear Constable,—You, who have so richly endowed my little collection, cannot refuse me the pleasure of adding to yours. I beg your acceptance of a parcel of MSS, which I know your partialities will give more value to than they deserve, and only annex the condition that they shall be scrupulously concealed during the author's life, and only made forthcoming when it may be necessary to assert his right to be accounted the writer of these novels.

'I enclose a note to Mr Guthrie Wright, who will deliver to you some of them which were in poor Lord Kinnedder's possession; and I will send some from Abbotsford, which will, I think, nearly complete the whole, though there may be some missing leaves.

'I will set about the Romance (for Encyclopædia Britannica) immediately, which will relieve my other labours. I hope you are not the worse of our very merry party yesterday.—Yours truly,

WALTER SCOTT,

The merry party mentioned above was the first Bannatyne Club dinner, at which Scott presided. This club, of which he was the moving spirit, had for its object the printing of Scottish books of history and antiquities. William Erskine, afterwards Lord Kinnedder, a bosom-friend of Sir Walter's, was a little man of feeble make, with 'small, elegant features, heetic cheek, and soft hazel eyes, the index of the quick, sensitive spirit within.' He it was who was 'chased out of the world by a calumny, killed by its foul breath.' In a word, a trumped-up story was circulated to his hurt, which broke his health and his heart.

On the envelope of the above letter Constable wrote, 'The most kind and valuable letter I ever received;' and in his reply a fortnight later he said that he would have great pride in 'preserving these invaluable treasures as memorials of your liberality and confidence; indeed, the gift is such as you only could bestow—and, you will forgive me for adding, such as you yourself only would have made. The whole shall be carefully arranged with my own hand, and be forthcoming when required.' Then the shrewdness of the publisher showed itself.

Constable forecasts the day when there would be attempts at illustrating the novels, when notes would be written full of absurdities and blunders. With Scott's consent he would get a set of all the novels, tales, and romances interleaved and neatly done up, which might be placed ready to his hand, when, if so disposed, the author could himself add suitable notes on the characters, scenes, and incidents. This was the earliest suggestion of the annotated edition of Scott's works, of which his creditors and Cadell, his publisher, were to reap the main benefit.

After Constable's failure there arose a delicate question as to the ownership of these Waverley manuscripts; did they really belong to the bankrupt estate? Lord Newton decided that they did, and these were sold by Evans, 93 Pall Mall, on 19th August 1831, for £317. One of the lot in 1897, as we have seen, brought double the amount of the whole thirteen. Constable had begun to collect Scott's manuscripts before the date of the gift already recorded. In 1821 he had noted on the flyleaf of Rokeby that he also possessed Marmion, Don Roderick and Field of Waterloo, Lord of the Isles, and Life of Swift. He added that 'the original MS. of the Lay of the Last Minstrel was not preserved; such things not having been thought important till the publication of Marmion, when I desired Mr Ballantyne to preserve the manuscript for me.' At that time John Ballantyne had the original MS. of the Lady of the Lake. We believe there is a copy of the original edition of the Lay in the library at Windsor Castle with Scott's MS, annotations.

The following are the prices realised in 1831 for Constable's manuscripts. A note in the catalogue was to the effect that these were all in the handwriting of Sir Walter Scott, and that the annals of literature scarcely afforded a similar instance of facility of composition. 'The public will be astonished to perceive the few erasures, alterations, or additions which occur from the first conceptions of the author to the final transmission to the press.' Although the saleroom was crowded by those curious to see these manuscripts, the public might be justly surprised to remark the small sums they brought. The first six were perfect, or nearly so; the rest were not complete. Some of them were bought on commission:

commission.	P	rice.		Purchaser.
The Monastery			0	Mr Thorpe.
Guy Mannering	27	10	0	Mr Thorpe.
Old Mortality	33	0	0	Mr Robertson.
Antiquary	42	0	0	Captain Basil Hall.
Rob Roy	50	0	0	Mr Wilks, M.P.
Peveril of the Peak	42	0	0	Mr Cochran.
Waverley	. 18	0	0	Mr Wilks, M.P.
The Abbot	14	0	0	{ Messrs Poole & Edwards.
Ivanhoe	. 12	0	0	Mr Rumbold, M.P.
The Pirate	12	0	0	Mr Molteno.
Fortunes of Nigel	16	16	0	Mr J. Bain.
Kenilworth	. 17	0	0	Mr Wilks, M.P.
Bride of Lammermoor	14	14	0	Captain Basil Hall.
		100	1.5	

A second collection of Scott's manuscripts was sold by private bargain to Cadell on November 9, 1833. These were the property of David Constable, advocate, son of the publisher, and consisted of the poems already mentioned as belonging to his father. In addition Cadell purchased the early letters of Scott in five quarto volumes (1796-1832). The price he paid for the letters was £105, and for the poems only £60, which contrasts strongly with the price recently brought by the Lady of the Lake, but which had evidently been regulated by the poor prices of the sale in 1831.

Guy Mannering, here bought on commission for Mr Heber, was resold in 1836 for £63, and was bought, it is said, for the Duke of Devonshire. It was sold at Sotheby's in 1880, 'forming a select portion of Lord Clare's books,' and brought £390. It is understood to have gone to America. Rob Roy, resold in 1847, was bought by Cadell and presented to Lockhart, and changed hands three years ago, as we have said, for £600. Another fragment of the Bride of Lammermoor was in the hands of Christopher Douglas in 1871; David Laing had a fragment of the Legend of Montrose at the same date; the Monastery, bought for Heber as above, passed into the hands of Sir Thomas Phillips, Middlehill, Worcestershire, for £45, 3s.; the Abbot, as will afterwards be seen, passed into the hands of John Murray; Kenilworth, bought at the Wilks sale in 1847 by Peter Cunningham for £16, was resold in 1855, and bought for the British Museum; the Pirate is in the hands of the widow of the Rev. Dr R. H. Stevenson, Edinburgh, second eldest daughter of Cadell; Peveril, bought on commission in 1831 for Mr E. V. Utterson, passed into the hands of Sir W. Tite.

The manuscript of the *Pirate* has the following note on the flyleaf in Cadell's handwriting (1834): 'A part of this, the original manuscript of the *Pirate*, purchased by me at the auction on 19th August, 1831. What makes it complete I received from Sir Walter Scott at Abbotsford, on 9th April 1831.' The three volumes are bound in one, and eight pages are awanting. We are indebted for this and several other important facts to Cadell's grandson, Mr J. H. Stevenson, advocate, Edinburgh.

Mr Robert Cadell, successor to Constable as Scott's publisher, had twenty-seven manuscript volumes, bound in full leather, with his crest in an oval ribbon on each side—a stag's head and the motto, Vigilantia non cadet. These he kept in a cabinet in his publishing office, 31 St Andrew Square, Edinburgh. Of the poetical works Cadell had Marmion, Lady of the Lake, Don Roderick and Field of Waterloo, Rokeby, Lord of the Isles, Introduction to Popular Poetry, Halidon Hill, &c. He had in 1835 also twelve of the Waverley Novels—namely, Old Mortality, Abbot, Pirate, Quentin Durward, St Ronan's Well, Redgauntlet, Tales of the Crusaders, Woodstock, Chronicles of the Canongate, Anne of Geierstein, Count Robert of Paris, and Castle Dangerous, the last of which was in

Mr and Mrs Laidlaw's handwriting. Of two fragmentary volumes, one contained about a volume of *Ivanhoe* with a small portion of *Waverley*, and the other a portion of *Tales of a Grandfather*. There were also five volumes of original letters (1796–1832).

In the same cabinet there was an interleaved set of the whole series of the Waverley Novels in thirtytwo volumes, containing the new prefaces and annotations-the suggestion of Constable (which proved such a success) at last carried out. This, we believe, is now in the hands of Messrs A. & C. Black. The Abbotsford edition cost more than £40,000 to produce. From 1829, when the novels came into Cadell's bands, until his death in 1849, as we have seen, the sale of Scott's works never slackened; while he paid no less a sum than £37,000 for Scott's copyrights before he had them under his wing, and not £8500 as stated in the Dictionary of National Biography. His own fortune of £130,000 was mainly earned by the sale of Scott's works. The profits gained have been set down at £300,000.

A writer (from internal evidence, apparently Mr

Robert Chambers), who saw Cadell's manuscript volumes, and described them in Chambers's Journal for 1835, was struck, as every one has been, by the neatness and uniformity of the handwriting and the absence of blotting and interlineation. In Ivanhoe especially he noted that there was as much manuscript as would fill five printed pages without a single correction, or even the appearance of a slip of the pen. The songs introduced seemed to have been struck off with the same easy grace as the connecting narrative. In the manuscript of the poems, the battle of Flodden, in Marmion, with its fiery, galloping verse, seemed also, so far as the handwriting showed anything, to have flowed as easily as the rest of the poem. Some of the manuscripts bore evidence of having been sent by post, in considerable portions at a time, and, as the postmark showed, from different parts of the country. The beginning of Marmion, with its description of a Scottish pastoral winter, addressed from Ashestiel to Mr Stewart Rose, was actually sent from London under a frank from the then Marquis of Abercorn.

JOHN BURNET OF BARNS.

CHAPTER III. -THE SPATE IN THE TWEED.



HE year 1683 was with us the driest year in any man's memory. From the end of April to the end of July we had scarce a shower. The hayharvest was ruined beyond repair, and man and beast were sick with

the sultry days. It was on the last Monday of July that I, wearied with wandering listlessly about the house, bethought myself of riding to Peebles to see the great match at bowls which is played every year for the silver horn. I had no expectation of a keen game, for the green was sure to be well-nigh ruined with the sun, and men had lost spirit in such weather. But the faintest interest is better than purposeless idleness, so I roused myself from languor and set out.

I saddled Maisie the younger-this is a family name among our horses-and rode down by the Tweed-side to the town. The river ran in the midst of a great bed of sun-baked gravel, a little trickle that a man might step across. When I came to the Manor Pool I stood still in wonder, for there for the first time in my life I saw the stream dry. Manor, which is in winter a roaring torrent and at other times a clear, full stream, had not a drop of running water in its bed-naught but a few stagnant pools green with slime. It was a grateful change to escape from the sun into the coolness of the Neidpath woods; but even there a change was seen, for the ferns hung their fronds wearily, and the moss had lost all its greenness. When once more I came out to the sun, its beating on my face was so fierce that it almost burned, and I was glad when I came to the town and the shade of tree and dwelling.

The bowling-green of Peebles, which is one of the best in the country, lies at the west end of the High Street, at the back of the Castle Hill. The turf had been kept with constant waterings, but notwithstanding it looked gray and withered. Here I found half the men-folk of Peebles assembled, and many from the villages near, to see the match, which is the greatest event of the month. Each player wore a riband of a special colour. Most of them had stripped off their coats and jerkins to give their arms free-play, and some of the best were busied in taking counsel with their friends as to the lie of the green. The landlord of the 'Cross-keys' was there, with a great red favour stuck in his hat, looking, as I thought, too fat and rubicand a man to have a steady eye, Near him was Peter Crustcrackit the tailor, a little wiry man, with legs bent from sitting cross-legged, thin active hands, and keen eyes, well used to the sewing of fine work. Then there were carters and shepherds, stout fellows with bronzed faces and great muscular chests; and the miller of the Waukmill, who was reported the best bowl-player in the town. Some of the folk had come down, like myself, merely to watch, and among them I saw Andrew Greenless the surgeon, who had tended me what time I went over the cauld. A motley crowd of the odds and ends of the place hung around or sat on the low wall-peachers and blackfishers and all the riff-raff of the town.

The jack was set, the order of the game arranged,

and the play commenced. For some time I watched the players. Then, when the game no longer amused me, I fell to looking over the country, down to the edge of the water, where the small thatched cottages were yellow in the heat, and away up the broad, empty channel of the Tweed.

Even as I looked I saw a strange thing on the river-bank, which chained my languid curiosity. For down the haugh, swinging along at a great pace, came a man the like of whom I had seldom seen. He ran at a steady trot, more like a horse than a human creature, with his arms set close by his sides, and without bonnet or shoes. His head swung from side to side as with excessive weariness, and even at that distance I could see how he panted. In a trice he was over Peebles Water and had ascended the bank to the bowling-green, cleared the low dike, and stood gaping before us. Now I saw him plainer, and I have rarely seen a stranger sight. He seemed to have come a great distance, but no sweat stood on his brow; only a dun copper colour marked the effect of the hot sun. His breeches were utterly ragged, and in places showed his long supple limbs. A shock of black hair covered his head and shaded his swarthy face. His eyes were wild and keen as a * hawk's, and his tongue hung out of his mouth like a dog's in a chase. Every man stopped his play and looked at the queer new-comer. A whisper went round the place that it was that 'fule callant frae Brochtoun;' but this brought no information to me.

The man sat still for maybe three minutes with his eyes fixed on the ground as if to recover breath. Then he got up with dazed glances, like one wakening from sleep. He stared at me, then at the players, and burst into his tale, speaking in a high, excited voice.

'I hae run frae Drummeller to bring ye word. Quick, and get the folk out o' the waterside hooses, or the feck o' the toun 'll be soomin' to Berwick in an 'oor.'

No one spoke, but all stared as if they took him for a madman.

'There's been an awfu' storm up i' the muirs,' he went on panting, 'and Tweed's comin' down like a mill-race. The herd o' Powmood telt me, and I got twa 'oors start o't, and cam' off here what I could rin. Get the folk out o' the waterside hooses when I bid ye, wi' a' their gear and plenishing, or there'll no' be sae muckle as a groat's worth left by nicht. Up wi' ye and haste, for there's nae time to lose. I heard the roar o' the water miles off, louder than ony thunderstorm, and mair terrible than an army wi' banners. Quick, ye auld doited bodies, if ye dinna want to hae mourning and lamentation i' the toun o' Peebles!'

At this, as you may believe, a great change passed over all. Some made no words about it, but rushed into the town to give the alarm; others stared stupidly, as if waiting for more news; while some were disposed to treat the whole matter as a hoax. This enraged the newsbearer beyond telling.

Springing up, he pointed to the western sky, and far off we saw a thick blackness creeping up the skyline. 'If ye'll no' believe me,' said he, 'will ye believe the finger o' God?' The word and the sight convinced the most distrusting.

Now the Tweed, unlike all other rivers of my knowledge, rises terribly at the first rain, and travels slowly, so that Tweedsmuir may be under five feet of water and Peebles high and dry. This makes the whole valley a place of exceeding danger in sultry weather, for no man knows when a thunderstorm may break in the hills and send the stream down a raging torrent. This, too, makes it possible to hear word of a flood before it comes, and, by God's grace, to provide against it.

The green was soon deserted. I rushed down to the waterside houses, which were in the nearest peril, and in shorter time than it takes to tell we had the people out, with as much of their belongings as were worth the saving. Then we hastened to the low-lying cottages on Tweed Green, and did likewise. Some of the folk seemed willing to resist, because, as they said, 'Wha kenned but that the body micht be a leear, and they werena to hae a' this wark for naething?' For the great floods were but a tradition, and only the old men had seen the ruin which the spate could work. Nevertheless, even these were convinced by a threatening sky and a few words from the newsbearer's trenchant tongue. Soon the High Street and the wynds were thick with household belongings, and the Castle Hill was crowded with folk to see the coming of the flood.

By this time the grim line of black had grown over half the sky, and down fell great drops of rain into the white, sun-baked channel. It was strange to watch these mighty splashes falling into the little stagnant pools and the runlets of flowing water. And still the close, thick heat hung over all, and men looked at the dawnings of a storm with sweat running over their brows. With the rain came a mist, a white, ghastly haze, which obliterated the hills and came down nigh to the stream. A sound, too, grew upon our ears, at first far away and dim, but increasing till it became a dull, hollow thunder, varied with a strange crackling, swishing noise which made a man eerie to listen to. Then all of a sudden the full blast of the thing came upon us. Men held their breaths as the wind and rain choked them and drove them back. It was scarce possible to see far before, but the outlines of the gorge of Neidpath fleeted through the drift, whence the river issued. Every man turned his eyes thither and strained them to pierce the gloom.

Suddenly, round the corner of the hill, appeared a great yellow wave crested with white foam and filling the whole space. Down it came, roaring and hissing, mowing the pines by the waterside as a reaper mows down hay with a scythe. Then with a mighty bound it broke from the hill-barriers and spread over the haugh. Now the sound was like

the bubbling of a pot ere it boils. We watched it in terror and admiration as it swept on its awful course. In a trice it was at the cauld, and the cauld disappeared under a whirl of foam; now it was on the houses, and the walls went in like nut-shells and the rubble was borne onward. A cry got up of 'The bridge!' and all hung in wonder as it neared the old stonework, the first barrier to the torrent's course, the brave bridge of Peebles. It flung itself on it with fiendish violence, but the stout masonwork stood firm, and the boiling tide went on through the narrow arches, leaving the bridge standing unshaken, as it had stood against many a flood. As we looked, we one and all broke into a cheer in honour of the masons who had made so trusty a piece of work.

I found myself in the crowd of spectators standing next to the man who had brought the tidings. He had recovered his breath and was watching the sight with a look half of interest and half of vexation. When all was past, and only the turbid river remained, he shook himself like a dog and made to elbow his way out. 'I maun be off,' he said, speaking to himself, 'and a sair job I'll hae gettin' ower Lyne Water.' When I heard him I turned round and confronted him. There was something so pleasing about his face, his keen eyes and alert head, that I could not forbear from

offering him my hand and telling him of my admiration for his deed. I was still but a boy, and he was clearly some years my elder, so I made the advance, I doubt not, with a certain shyness and hesitancy. He looked at me sharply and smiled.

'Ye're the young laird o' Barns,' said he. 'I ken ye weel, though ye maybe are no acquant wi' me. I'm muckle honoured, sir; and gin ye'll come Brochtoun-ways some time and speir for Nicol Plenderleith, he'll tak' ye to burns that were never fished afore and hills that never heard the sound o' a shot.'

I thanked him, and watched him slipping through the crowd till he was lost to view. This was my first meeting with Nicol Plenderleith, of whose ways and doings this tale shall have much to say. The glamour of the strange fellow was still upon me as I set myself to make my road home. I am almost ashamed to tell of my misfortunes; for after crossing the bridge and riding to Manor Water, I found that this stream likewise had risen and had not left a bridge in its whole course. So I had to go up as far as St Gordian's Cross before I could win over it, and did not reach Barns till after midnight, where I found my father half-crazy with concern for me, and Tam Todd making ready to go and seek me.

SEA-GIRT SOCOTRA.



OCOTRA is neither a large nor a commercially important island. Its position, however, on the highway between the Mediterranean and India, and the Far East generally, gives it other claims to fame or

notoriety. Situated as it is where the Gulf of Aden and the Indian Ocean combine their waters, Socotra is an important landmark for vessels navigating those seaways. It lies some 220 miles from the Arabian coast and 150 from Cape Guardafui, and may be regarded, in fact, as a sort of outpost to that African headland, whose bold and forbidding character forms such an appropriate finial to the rugged and dreary tracts of sunburnt Somali-land. Seen at a distance from the deck of some liner, Socotra forms a picture at once beautiful and impressive. The island approximates in shape to that of an elongated ellipse, being some 70 miles long and 22 in width, with the major axis running from east to west. Surrounding the coast-line at varying distances from it are numerous reefs, many of them altogether submerged, but still sufficiently near the surface to give evidence of their whereabouts by intercepting and converting into a tumbling mass of white, broken water the heavy swell which ever sweeps upon some part or other of the coast. Beyond the broken surf-line there lies in some parts a sandy beach, in others a bold and rock-strewn shore, which affords a fair index to the inhospitable character of the island itself. But these low-lying regions are of no great extent. They form a sort of girdle round the island proper, for they vary in width from two to four miles, and beyond them rises in grand abruptness the volcanic peaks which form the real Socotra. These, viewed from a passing vessel, with all their repellent features shrouded in purple mist rising skyward from a deep-blue sea, relieved with the white line of broken water, form a picture which, once seen, is never forgotten. A closer inspection of the island, however, discloses numerous ravines or wadys of varying degrees of fertility, permitting communication with the high lands of the interior. Here dwell the nomads who constitute a considerable proportion of the population. Their mode of life does not differ much from that of other nomadic Arabs, their flocks and herds supplying them with the necessities and the means of securing from the more commercial population centred about Tamacreed the luxuries they require. This section of the inhabitants is of mixed origin; Arabs, East Indians, and Portuguese all sharing in the little trade which the island enjoys.

But the seaways surrounding Socotra are, in view of the enormous volume of traffic which navigates them, of quite equal interest with the island itself. The granite mass of Socotra rises with an approach to abruptness from the sea-bed. In fact, the average depth of the sea-floor upon which Socotra rests may be put down at 1000 fathoms, while seawards from the eastern extremity a depth of 2000 fathoms is rapidly reached. The surface-water about the island drifts in directions which vary with the prevalent winds, and it is the imperfectly understood direction and force of these currents which constitute not the least danger which the island offers to the navigator.

Generally speaking, but two winds are known at Socotra-one from the north-east and the other from the south-west. These are the seasonal aerial movements called the monsoons; and it will be readily understood that these winds are capable of producing oceanic currents which, eddying round Socotra and deflected from the African and Arabian coasts, will produce a variable drift which may carry a vessel miles from her assumed course. It is during the prevalence of the south-west monsoon that Socotra is most dangerous. Then the superheated lands of Asia have superincumbent to them a hot, and consequently rare, atmosphere; and to compensate for this extensive region of low barometric pressure steady winds of increasing force blowin from the south-west. Naturally these winds will attain to their maximum strength during the months of June and July. Coming, too, as they do, from the regions of the southern winter, and crossing an expanse of ocean, they supply all the requirements necessary to enshroud with mist and bathe in a copious rainfall any high lands which intercept them. This monsoon is sometimes called on this account the wet monsoon; while, from the force of the wind as compared with the more trifling aerial disturbance produced by the north-east seasonal wind, it is frequently alluded to as the monsoon simply. But perhaps the worst source of danger which this monsoon brings to the navigator is the obscuration of the heavenly bodies by a partially-condensed moisture resulting from the admixture of atmospheres of different temperatures. Thus it is no uncommon experience for a ship making a voyage across the Arabian Sea to be for four days at a stretch unable to obtain an observation.

This implies, of course, great uncertainty as to the vessel's position; and if we add to this the strong winds and heavy seas encountered, and the fact that the surface-drifts are exceedingly variable, it is quite easy to understand that a shipmaster may be carried far out of his course, and that without knowing it. Some such weather-conditions as these doubtless obtained when the Aden made her last and fatal voyage from Colombo. Of course it may be urged that, knowing the track as commander and officers would, the disaster should not have happened. But, as we have already shown, the risk factors would be of the greatest. Monthly current-charts of the Indian Ocean, compiled by the Meteorological Office and based upon observations extending over a long period of years, show during the month of June no less than three distinct currents running in different directions between Guardafui and Socotra. Add to these adverse factors the probability that the island was approached during a dark or misty night, and it would have been matter for wonder had the vessel escaped the treacherous reefs that line the coast. But apart from the question of professional failure to avoid Socotra, it must be admitted that the tragedy enacted on the doomed ship brings out into bold relief the sterling selfsacrificing bravery of the British sailors. Of the navigational staff not one has escaped, so far as is known, to tell the official story of the disaster. They died where British sailors never fear to face deathat the post of duty, striving to save the lives of those entrusted to their care. And shortly before the Aden was battered to pieces by the fearful seas which swept over her, an equally horrible tragedy of the sea had been enacted but a few miles away. A pilgrim ship, the Sultan, bound for India, was overwhelmed by the fury of the monsoon; and had not the Valetta, an Australian mail-boat, appeared upon the scene, not a soul would have escaped to tell the tale.

Although the perils of this ocean route are so materially augmented by the interposition of Socotra, and though England has had a vested interest in the island since 1877, and a real stake since 1886, when it practically became a British possession, little or nothing has been done to safeguard from its dangers the enormous tide of shipping which sweeps past its shores. Of this commerce the traffic passing through the Suez Canal may be taken as the approximate measure, and this amounts in a single year to about 3500 vessels of a net tonnage of about eight and a half million tons, of which over seventy per cent. is British. There is thus every reason for the provision of warning lights and fog-signals upon the island of Socotra. And this obligation is strengthened by the fact that a very considerable number of the British vessels navigating the Gulf of Aden have a large passenger-list. Of course it will be maintained by some that ships should give Socotra a wide berth; that there is abundant searoom for a vessel to avoid the island altogether, and thus run no risk whatever, &c. Man, however, may propose to avoid Socotra, but the uncontrollable forces of wind and sea may dispose otherwise, as they did in the Aden case. Besides, if Socotra is not to have light-warnings because vessels need not sight the island, the same argument would be equally applicable against the majority of lighthouse and fog-signal erections. But it is not only seagirt Socotra which requires bringing into line with the requirements of the times; the shores of the Gulf of Aden also need additional warnings. The straits of Bab-el-Mandeb, though less the Gate of Tears' than they were in bygone times, are none the less a place of great peril to the navigator, as, in fact, is the southern section of the Red Sea generally. During the past twelve years over seventy disasters have occurred to British vessels either in the Red Sea or the Gulf of Aden, adjacent to the

dreaded straits. Many of these casualties were strandings of a trivial character, the vessels getting off without having sustained much damage. A study of these cases shows that the chief cause of catastrophe was the unknown currents. Quite recently the unlucky *Oratava*, the steamer which capsized in a London dock, went ashore some twenty-five miles from Perim; and for services rendered the Admiralty Court made an award of £11,000—a sum which shows how serious is the risk a vessel runs by stranding upon a Red Sea coral reef. Currents, of course, are encountered by night as well as day, and it would therefore be almost an impossibility to spend too much money in lighting the shores, insular and continental, of the Gulf of Aden and

the Red Sea. A reliable light and fog-signal on Socotra would prove of inestimable value, for in fair weather and foul mariners would not only be warned off the rock-girt coast, but they would also be enabled to fix their position, and so pursue the remainder of their voyage with a more accurate knowledge of their exact whereabouts. Up to the present Socotra has not proved of much use to England. Commercially it never can, for, with the exception of aloes, it produces little or nothing. Strategically it has a potential use; but were a good lighthouse erected upon it, Socotra would become a friend instead of a foe to the mariner, and a valuable link in the chain that connects us with India and our other possessions in the eastern hemisphere.

THE GURNARD ROCK.

CHAPTER II.



Monday morning the news was brought to Gabriel Lowry that the Porthillian man was waiting for him on the pier; and Lowry walked down the street with a following of many men and boys, and a few

of the coarser women of the place.

The stranger sat at the end of the pier placidly smoking. Lowry advanced towards him, and the expectant crowd fell behind in a half-circle.

So you'm come?' said Tregenna, calmly knocking the ashes from his pipe.

'Iss, I've come,' answered Lowry.

'An' you've brought a purty tribe at your tail,' continued the other, glancing contemptuously at the crowd.

'I didn't bring 'em; they comed,' said Lowry sullenly.

'Hearken to me, Gabriel Lowry,' said the Porthillian man, rising to his feet; 'tis a likely day for the mackerel, an' my mates'll be busy. Good fishin', as thee knawst, comes o' the Lord's bounty; but fightin's a fule's job, an' can be had any day; so, with your favour, us'll fish to-day an' fight to-morrow.'

'Any time,' answered Lowry; 'tis no olds to me.'
'An' look here, my man,' continued Tregenna.
'I've got a wife an' two children in Porthillian, an' 'tisn't fitty for me to be makin' a shaw an' a shame of myself before a passel o' St Budoc goodfor-norts. I warn't fight 'ee here with these gaping fules around us; but I'll meet 'ee man to man, us two together, an' us'll fight it out quiet to ourselves.'

'Anywheres,' assented Lowry.

'Twill be low-water on the Gurnard Rock tomorrow forencon—us shan't be interfered with there. If you're man enough you'll meet me on the Gurnard, an' us'll fight out this quarrel to the finish.' 'I'll meet 'ee,' responded Lowry.

'I'll be here with my boat to-morrow morning: avan boat's enough for two men, though they'm adversaries. I'll take 'ee to the Gurnard, an' I'll bring 'ee back—what's left of 'ee.'

'So be it,' said Lowry.

Tregenna swung himself lightly from the pier, and dropped into his boat. With a few strokes he put a stretch of water between himself and the disappointed crowd of St Budocians; then, staying his oars for a moment, he called back to Lowry:

'The Gurnard Rock!'

'The Gurnard Rock!' echoed Lowry.

'To-morrow forenoon—I'll be here with my boat for 'ee in the morning.'

'Right!' shouted Lowry.

He looked strangely handsome, this yellowbearded Porthillian fellow; there was a fascination in his face, and he spoke throughout the brief parley in a tone of good-humoured disdain.

Lowry watched him as he rowed out to the little fleet of fishing-boats; and he repented in his heart

that he had struck the man.

The little pier at St Budoc was built in 1755, by Lady Deborah Polperro, to the glory of God and the pious memory of her father, Sir Reginald Polperro, for the protection of the fishing-vessels from the waves of the Atlantic. This was originally inscribed upon the granite, but the waves of the Atlantic resented the inscription, and long ago washed it out; they have as yet, however, failed in their frequent attempts to wash away the structure itself.

St Budoc is a gossipy town, where a communal publicity is given to everybody's private affairs, and the pier is its favourite meeting-place, its forum and its lounge. The stones of the parapet are worn and polished by the elbows and haunches of the generations. The children sprawl prone upon this wide sea-wall, and swop marbles and play at knuckle-dibs; the youths and hobble-de-hoys sit thereon and dangle their legs, and the kicking of heels for a century and a half has worn irregular furrows on the granite; men of graver years will lean upon the wall in a solemn row, and meditatively smoke their pipes; and on fine days old, vacant-eyed men will crawl hither on two sticks, and stare significantly seaward.

The pier juts south, with an extension that trends to the south-east, and in the angle a large block had been dislodged by a storm, leaving a chair-like niche, which by general consent was the privileged seat of Captain John Johns—locally 'Cap'n Jan Jans,' intimately and affectionately 'Old Jansie.'

Captain Johns, retired master of a coastingschooner, was a short, stoutish man, with a puckered face, a jovial mouth, and gray-blue eyes that looked kindly on the world and found it humorous in the main. He had an encyclopædic knowledge of maritime matters, and could be profitably consulted on anything from an equinoctial gale to the price of a new tar-brush. If a man desired to forecast the weather, the simpler and better way was to ask Captain Johns, the alternative being to consult the barometer at the 'Compass.' This instrument, by the way, was responsible for much of the drinking habits of the fishermen, every reference to it being accompanied by a mug of cider; and on thirsty days the fluctuation of the mercury was a matter of absorbing interest. It is a saying in St Budoc when a man staggers with liquor that the 'b'rometer's purty low.'

It was Tuesday morning, and there were many loungers on the pier, for a fisherman's leisure falls at strange times. Sea and sky were blue with an Italian blueness, and a week's placidity had given a phenomenal clearness to the water, which on this clean coast of rock is translucent fathoms down.

The great topic of conversation was the impending fight. There was at first a strong feeling of resentment at the conditions of privacy, which some considered an unwarrantable infringement of their proper and natural rights as spectators; but the strange compact and the idea of this fight between the two men on a desolate rock was full of romantic possibilities that stimulated the imagination and compensated somewhat for the disappointment. Gossip had already, in local phrase, 'made wonders' of the coming combat. It was to be no mere bout of fisticuffs, but something gladiatorial in fierceness and result. All the rivalry and animosity between St Budoc and Porthillian would culminate in this supreme encounter; and Porthillian was to be licked.

'What do 'ee think of this yer fight, Cap'n Jan?' said old Caleb Hocken the sailmaker.

Captain Johns gravely shook his head. 'I doan't like it. 'Tis onnatural and onseemly for they two poor sawls to be a-lerrupin' one another like haythen on thicky rock, with niver a man to see

fair and enjye the sport; to my mind 'tis most onrighteous.'

'Will 'em fight fair with their fistis?' asked Jacob Trewarne (an absurd rumour of weapons was abroad); 'or will there be shootin' or knivin'! I hope there warn't be any foreign iniquity o' that kind.'

'All fighting's bad,' said Polreggan, who had vainly attempted to avert the combat by remonstrating with Gabriel Lowry.

'An' yet there's some rare good fightin' in the Scriptur', argued Nick Maddern the tinker. He was a gipsy-looking fellow, with silver rings on his brown fingers, and was commonly suspected of rank unbelief.

'Iss, an' some rare good fishing,' responded Polreggan; 'but the fighting's wan end, an' the fishing's tother, an' I reckon 'tis only the fishing that consarns a man's sawl.'

'As for Scriptur' fightin',' said Joe Kevern, 'they fought for their awn 'ginst their nat'ral enemies; an' when a Porthillian scum comes here an' catches our fish an' rips our nets, what is 'a, so to spake, but a durned Amalekite?'

'Us mustn't take the Scriptur' too literal,' said Captain Johns solemnly; 'that's the mistake old Cap'n Jarvis made. He was mazed wi' drink, an' he imagined in his fulishness that he was King Saul, an' he made Billy the boy stand before 'en and play upon the 'cordian. "I'm mortal sorry there isn't a javelin aboard," says he, "but us must steer as near the Scriptur' as us can;" and wi' that he flinged a handspike at Billy the boy. Now if old Cap'n Jarvis hadn't a-been so durned partic'lar literal he might ha' been sailing the salt say to this day, instead of which he's beached high and dry in Bodmin Asylum.'

'I was niver in a fight myself,' said Calab Hocken, a diminutive, wizened man, 'but I wrastled wanse to Tregartha fair. They matched me 'ginst Anak Varkar—his name warn't rightly Anak, but they called 'en Anak in sport, on account of the stature of 'en—though to my mind 'tisn't fitty to sport wi' Bible names—an' Anak catched me by the slack, an' shaked me like a boy shakes a rabbit; an' he calls to old Moll Trevance the fish-woman, "Spread wide thy apern, Moll; yer's a purty little man for 'ee."

'The only fit wrastlin' for thee, Uncle Caleb,' said one of the younger men, 'is the wrastlin' o' the sperrit.'

'Trew, trew,' replied the old fellow, with some pride; 'I'm mortal cripply in the back an' limbs; but I was always reckoned terrible strong in supplication.'

At this point there was a cry of 'Yer he comes!' and all eyes were turned to the approaching boat of the Porthillian fisherman.

It must be confessed that the people of St Budoc did not give the stranger a very chivalrous reception. The boys wasted howls upon him long before he was within hail, and when he brought

his boat to the pier-steps he was greeted with a tumult of jeers and denunciations. There were some women of the rougher sort in the crowd, and these were loudest in their maledictions. They flung fish-heads at the man, and epithets that were worse than fish-heads. They derided his birthplace and flung aspersions on his origin. They would gladly have ridiculed his personal appearance, but the fellow was unassailably handsome, and it was a poor expedient to prophesy that he 'widden' look so purty when he comed back.'

As for John Tregenna, he minded their abuse and execrations as little as he heeded the water that dripped from his oars. There was laughter in his eyes as he dodged the fish-offal that never struck him, and he looked up at the crowded row of his assailants with a smile that was half amusement and half disdain.

There was a noisy ovation for Gabriel Lowry as he walked along the beach to the pier, looking stalwart and fit, with an appropriate scowl upon his face. They made a lane for him, and patted him boisterously on the back as he passed to the pierhead; and their fragments of pugilistic counsel were numerous and varied.

'Doan't 'ee spare the toad!' cried one woman, red-faced and raw-elbowed.

'Smite 'en hearty, my sonny, an' be spry with 'en,' said Ned Trewithey the ropemaker.

'He's weightier than thee, Gabe; spar round nimble, and he warn't last!' counselled Nick Maddern.

Perhaps this fistic advice found its highest expression in the impromptu couplet of Captain Johns:

'Hit 'en awft, And doun't 'ee hit 'en sawft,'

which was afterwards remembered and quoted as a saying of some brilliancy.

To do Gabriel justice, it must be recorded that he ignored these encouragements of his friends, and resented their treatment of his adversary. He turned for a moment as he descended the pier-steps, and cried fiercely to the rabble of women who were simultaneously vociferous as he passed: 'Git'long home—the whole pack of 'ee!'

As Lowry stepped into the boat Tregenna greeted him with a nod, and said quietly, 'You take the tiller,' and ducked his head at a missile of mackerel, which struck the other in the face.

They were strangely in contrast: Lowry sullen and dark of face, Tregenna yellow-bearded and debonair, looking absolutely joyous in the morning sunshine. The heart of more than one woman secretly changed sides as she watched the man.

Tregenna took the oars and pulled away from the pier amid cheers and hootings—the latter being his share of the mingled valediction.

They were some hundred yards from the shore, when a tall figure broke frantically through the crowd and climbed the sea-wall; a gaunt old man with a ragged white beard and a long-tailed black coat. It was Malachi Praze, the wayside preacher, known in the mining villages as 'Old Wrath-to-come' on account of the fervour of his denunciations; a worthy, half-demented creature, whose picturesque utterances were not without attraction to certain of the rougher people.

He stood on the very edge of the parapet beneath the lantern at the pier-head, and gesticulating wildly with his long arms, cried aloud: 'Turn back, turn back, ye that smite with the fist o' wickedness!' But the boat sped on.

'Turn back!' shricked Malachi at the top of his voice; 'turn back before your hands be defiled wi' blid and your fingers with iniquity—turn back, ye evil-doers!'

But the boat continued its course, and the evildoers were beyond hall of imprecation or entreaty.

Lowry steered south-west, and as the boat turned, his eyes sought a certain whitewashed cottage on the slope beyond the coastguard station; and behind the fuchsia hedge he caught the glimpse of a white sun-bonnet and the flutter of a handkerchief.

RARE AND PECULIAR DRUGS.



ERE Wayland Smith at this day in want of the particular drug without which his electuary, to act as antidote to the 'Manna of St Nicholas,' taken in the sturgeon-sauce by the Earl of Sussex, was useless—and

which the apothecaries of Fleet Street either knew nothing about or were sceptical of the existence of—he would probably not have occasion to hunt up any obscure Jew chemist for it, nor exercise the passage of wit, or quackery, he found necessary in obtaining it from Zacharias Yoglan. Probably nowadays it would be widely advertised as a patent medicine, warranted to cure a greater list

of ills than ever the farrier of the Vale of the White Horse thought flesh heir to. And the quack of to-day, if in possessing it he has not himself attained the 'Elixir of Life,' yet succeeds pretty well in persuading his patients that they may buy it of him; and, in their keenly-aroused faith, will have succeeded, any way, in the second main aim of his ancestral humbug, the alchemist—the ready handling of much gold.

The chemist of to-day is a much less picturesque individual than his mediaval prototype, and the bulk of his orthodox trade far more commonplace in character. The mass of drugs nowadays, including, fortunately, most of those of proved value—

senna, squills, quinine, and so forth—are cheap enough; still, there are yet to be found in his shop a few rare and peculiar ones, around which the imagination and philosophical speculation can have some amount of room for play. A fair indication of this rarity is, naturally, to be found in price; and the layman, running through the items in the price-list of a druggist, could easily pick the rare ones out by remembering this fact alone. Why they should be so is another, and oftentimes interesting, matter.

Saffron, for instance, would strike an ordinary observer as decidedly expensive at fifty-six shillings a pound, until told that it is composed of the central small portions only of the flowers of a species of crocus, seventy thousand of which it takes to yield the material for one pound. The wonder then becomes that it is so cheap, that it can pay to grow and gather at the price. As a matter of fact it has failed to pay the English grower-by this retaining, in the name of his town of Saffron-Walden, but a hint of former importance in this particular direction; French and Spanish soils being more suitable to the full growth of the flowers, and foreign labour cheaper in the work of picking. Its use in medicine has practically died out, bar perhaps the popular belief that, steeped in hot milk or cider, it helps the eruption of measles to fully appear. As a dye in creaming curtains, and to give a rich appearance to cake, it is still, however, in general demand; for which purpose it is well suited, in being both harmless and strong, one grain, composed of the style and stigmas of nine flowers, being sufficient to give a distinct yellow tint to ten gallons of water. Its high price, by the way, has led to a peculiar form of adulteration; for, apart from the crude and commonplace one of dusting with a heavy powder, such as gypsum, to give weight, the similar portions of other and commoner flowers have been specially dyed and worked thoroughly in amongst the genuine ones.

Of similar origin, though chosen for scent in lieu of colour, are the essential oils of many flowers; and easily first of these must rank that of the rose, known commonly as otto, or attar, of roses. Roses being so common, it may be imagined how small the yield of oil must be to account for a quoted price of thirty-six shillings an ounce, or £28 odd per pound; and this to the chemist himself. What it resolves itself into as a retail price is hardly worth going into, as a retail demand—beyond an occasional drop at sixpence upon a handkerchief, upon a special occasion-is unknown; its chief use being in scenting powders and the making up of fancy compound scents. Ten thousand pounds—or nearly five tons-of roses it takes to obtain one pound of the oil. These are distilled with twice their bulk of water, and the otto skimmed-very carefully skimmed-off the surface of the distillate in the receiving vessel. The adulterator has again here a field for action—which he avails himself of—in

distilling a proportion of geranium flowers, the oil of which has a somewhat similar rosy smell, with the roses; this paying, in that it takes but the comparatively humble number of five hundred geranium flowers to yield a pound of their oil. Constantinople being a port of shipment, sailors, after their usual amiable weakness of being swindled, buy cheaply there, for presentation to appreciative wives and sweethearts at home, long, narrow, gilded bottles of supposed otto of roses; in reality, bottles which the genuine article has been poured into, and out again, and then filled with a clear, scentless oil of the same appearance and specific gravity as the true; the few remaining drops, clinging to the interior of the bottle, being strong enough to convince the smelling buyer that he has got the right thing on the spot.

Another peculiar—and at a sovereign an ounce rare—vegetable drug, though less harmless and pleasant than those already mentioned, is curare—the arrow-poison of the South American Indian. Very powerful it is as a death-dealer in the rough subcutaneous method of administration, smeared over an arrow-head, of the native exploiters, though it is said to be harmless when not taken directly into the circulation; the natives, at any rate, cat freely of the bodies of animals killed by its means. As a medicine it has been advocated and used as an antidote to strychnine poisoning—setting a thief to catch a thief, this, with a vengeance.

If peculiarity be held to include strength as a poison, we can safely add strychnine, with a dose of one-twentieth, and atropine, the active principle of deadly-nightshade, with that of one-sixtieth, of a grain. Small doses; but the palm must be given, as the very strongest poison, to one yet more powerful, in the shape of aconitine, an alkaloid extracted from the root of monkshood, with the phenomenally small dose of one-six-hundredth of a grain. Being so very small, we can well afford to look with equanimity at the price—£27 per ounce; and a drug firm, in however big a way of business, would probably look twice at, and require confirmation of, an order from any chemist customer for a pound.

'How are these small doses certified to be of the exact strength prescribed?' will perhaps, and naturally enough, be asked. In the case of a soluble drug the answer is of course plain, for a handleable quantity has simply to be dissolved in a certain quantity of water and the solution suitably divided. In the case of its not being soluble, the function of the water is fulfilled by a bulky, inert powder, such as a liquorice powder or sugar of milk, with which it is thoroughly rubbed down, and the intimately mixed whole divided into calculated doses. Little difficulty is found in doing this in careful practice, ophthalmic discs, for the use of eye-specialists, weighing but one-fiftieth, and containing one-five-thousandth, of a grain of the active body, figuring in the official pharmacopæia.

Turning from the vegetable to the animal world in search of rare drugs, we have to go to quiet and little-known regions—the high-lying plains of Asia, for instance, where lives a small deer, described as 'solitary, shy, and nocturnal in its habits.' With good reason has he, poor little fellow, evolved these habits in his painful struggle for existence; for does he not carry about him a couple of small pouches containing musk, which, at £6 to £7 an ounce, must be a prize to the wily hunter-besides what he can make, in addition, by taking the true article, with the exception of a few grains, out of the pouches, filling them up again with dried blood (very much resembling the original contents in appearance), and selling them as genuine? The old-fashioned use of musk as a remedy for epilepsy has-as much perhaps from the discovery of stronger and more reliable ones as from a question of cost-pretty well died out; but as a scent it is well worth its high price in the persistence of its sweet smell. Did not some ancient Egyptian masons thousands of years back -and, emphatically, before the day of the jerry builder-mix musk with their mortar; and has not the scent lingered, a perennial incense, over their work to this day? Has it not also been said that a little musk, kept in a vase with a perforated lid, will scent a room for years, and when weighed at the end, show no appreciable loss?

A fact this, by the way, offered by scientists to prove the extreme divisibility of matter, for the at most very small amount lost must ever have been floating as particles in the air, knocking up against nerve-endings in the nose, to have produced the sense of smell. And particles of musk must, further, be huge lumps by comparison with the size of the constituent atoms of the bodies that chemically go to make it up.

Leaving land, and taking to sea, in our search,

it may be our extreme good fortune, particularly in the seas washing Madagascar, Surinam, and Java, to come across a floating, sweet-smelling, grayish mass of ambergris, worth at present £5, 10s. per ounce, or £88 a pound, in the market. Such a find need not either, like the other, in which an innocent and inoffensive animal is killed for having about it a possession it cannot help, psychologically distress the finder; for 'ambergris' is held to be a 'diseased biliary product' of the whale, of which, as such, it doubtless considered itself to be well rid.

Another peculiar animal product in use as a drug is a solution of the pure venom of the rattlesnake, given occasionally in malignant scarlet fever; whilst less strong, if perhaps hardly less repulsive, is powdered cockroach, which, in six-grain doses, has been prescribed—with good effects, it is said—for dropsy.

But let the reader take heart of grace, they must be in extremely limited use, and it is not likely that he will ever be called upon to personally swallow them; although the lining of a pig's stomach, scraped and dried, he must not object to, if his doctor prescribe it as pepsine, for indigestion.

With respect to this body, some short time back, a logical observer, whilst giving full credit to the pig as a powerful digester, argued that, the ostrich being apparently a more powerful one still, pepsine prepared from its stomach must be proportionately stronger; and that, if capable of digesting, at its best, the brass taps, buttons, sardine-tims, knives and forks, dish-clouts, and so on that an ostrich is said to eat with apparent relish, even in a reduced form it would be strong enough to easily digest anything in reason in the human stomach. The experiment was carefully tried, and the digestive values of the two pepsines put to the test, with the result that the ostrich 'wasn't in it.'

A HANDFUL OF PERILS.



OUNGER sons are given to grumbling at their lot. I was an Irish younger son and a gentleman-farmer, and I considered it one of my luxuries to have a good grumble to myself whenever I liked.

I was one evening thoroughly enjoying a pipe over my fire and the afore-mentioned amusement, and was just murmuring to myself, 'Peace and quiet at least till to-morrow morning,' when I heard a whistle at the window, and started to my feet. I knew that whistle well enough; it was old Mike's 'lookout' call. He was my uncle's keeper, and I had known that signal from my boyhood.

But why should he come and whistle under my window? We were not out ferreting; and for the first moment I felt inclined to tell him to go and knock at the door like a Christian; but in those

days a man was easily put upon his guard, and so I silently raised the window-sash and looked out into the night.

'Your honour will be taking a turn round the haystacks,' whispered a voice; and I knew, more than heard, that some one moved away from the window.

Happily you English people cannot understand the state of things which used to exist here; for no one who has not experienced it can really understand it. I dare say what I am saying to you sounds like the absurd mysteries of a stage conspiracy, but to me it was terrible earnest.

Taking a revolver in one hand, I sauntered out, pipe in mouth; and after a pause and gaze at the river, planned to disarm suspicion in case of watching eyes, I strolled on to the haystacks.

It was all but pitch-dark; there was barely

enough starlight for me to make out a figure, which by its voice I recognised as Mike.

'Ah, your honour! it's at the peril of my life I've come to bid you ride the hour that is to Finnsmore, and stop Sir Patrick from going to the fair to-morrow, or never will he come home a mortal man! Never speak a word of how you got warning, and indeed I trust you for that; but, maybe, if the young mistress had not been so good to my Mary, who is gone to the angels, I might have looked far for the courage to be here this night.'

'I have not seen any one here,' I replied. 'I have heard a whisper; that is all.'

There was a slight rustle of leaves, then silence. The dear old fellow was gone.

I stood about a bit in the yard, and then went in again, loitering in the doorway, so that old Bridget, my housekeeper, might not think anything had flurried me.

As I sauntered along, however, I thought over

the position and made my plans.

The affair was anything but pleasant. Sir Patrick O'Hara was my brother-in-law, married not six months to my only sister, Theresa. Like so many Irish gentlemen, Patrick had a model farm, and, as is so often the custom with the resident landlords, would be going early the next morning to the neighbouring cattle and butter fair. Mike evidently meant that there was to be an attempt on his life as he drove there in the twilight of the early morning.

I thought my brother-in-law would be starting not later that five o'clock—it was now only nine in the evening; so, though I had twenty-five miles of mountain road to traverse, there seemed to be plenty of time to do it in.

The nearest way was by a ferry; but on Mike's account that was out of the question, as it entailed knocking up the ferryman and making a commotion. I settled that, though it was a bad road, I must go over the mountain.

'Bridget,' I called, 'I am going off to stay with a friend. Don't expect me till you see me.'

Bridget was accustomed to my going and coming with little or no notice, so, though I did not generally start at nine at night, I did not expect her to show much astonishment. As it was she merely said, 'Yes, your honour,' with an audible aside to herself, 'Glory be to goodness! now I'll get the washing done in peace.'

I packed a small bag and saddled 'Tommie,' a big, strong pony, who, I thought, would be more fitted for the expedition than my mare.

I led Tommie quietly down a grass byway to avoid clattering past a row of cottages. I did not wish to attract attention to my movements. Once on the road, I mounted and trotted along; for some way I had to go along the valley, then to turn up to the mountain through a glen to the right.

This glen was not exactly the ride I should have chosen for a dark night; the road was made along a rocky bank, and on one side there was a sheer descent of some thirty feet into a chasm, at the bottom of which a mountain stream hurried down to the river in the valley.

Naturally I let the pony take his time over this bit of road, and we did not get on very fast, as it was a stiff pull; but at last we had nearly come to the end of it, and I was looking forward to a trot over the mountain turf, when suddenly Tommie gave a violent shy, his hind-legs went over the edge, and for a moment we swayed on the brink, while I felt his hoofs scratching for foothold among the rocks; then he got a point of leverage, and, with a desperate lunge, swung himself up again on to the road, where he stood shaking from head to foot.

'A near thing that, my good Thomas,' I observed as I dismounted in order to find out what it was that had made him shy. To my astonishment, I found in front of me a large black coffin!—not a pleasing sort of package to be thus 'left till called for' upon the open road. Not a creature was to be seen near it; but as I could see but a few yards through the darkness, that was not saying much. Like the Chinese admiral, I reflected, 'This is no place for me,' and after a tussle with Tommie, managed to get him past the coffin, and led him up the road as fast as ever I could.

Once on the open mountain turf, I mounted, promising myself a fast trot; but, to my disgust, I found the pony had twisted his foot in our small adventure, and, vexed as I was, there was no help for it—we had to proceed at a walk.

The night had cleared during the last half-hour, and the moon was rising—that was one comfort. I have been through open dangers many a time, so I trust I'm no coward; but I allow that black, stray coffins on dark nights are not to my taste, and I felt a bit of a shiver as I thought of it, and remembered, moreover, that I had to pass the ruined chapel on the mountain, whose graveyard was said to be 'as full of ghosts as the river of fish.'

I will not say I altogether disbelieve in ghosts, as generally known; and it flashed into my mind that I was likely to come in for ghosts of a more substantial kind, and with some excitement I remembered the whispered reports of moonlight funerals which were heard from time to time,

I must explain that when a man was injured in some lawless outrage, the first thought of his companions was to get him carried away to some secluded spot, since the fact of finding a wounded man might very likely give a clue to the police which would help them to identify the rest of the party.

If the wounded man recovered, good and well; if he died, a public funeral was out of the question, but a midnight funeral in one of the many grave-yards round ruined churches was possible. An obliging priest would come for a consideration from some distant place, and a company of well-armed friends assembled at dead of night to lay their comrade to rest in holy ground.

So strongly was I possessed with the idea that there was going to be a funeral that I dismounted when about a quarter of a mile from the chapel, and fastened Tommie, with a long halter I often took with me, to a thorn-tree. Then I walked forward to spy out the land. The road here lay through a glen or dip in the mountain, on either side the ground rose in a steep, rocky slope, and only on the highest point of the little pass did the track widen out, leaving room for the ruined chapel and burial-ground. Keeping to the side of the road and walking as noiselessly as possible, I advanced slowly, and as I drew near the chapel I heard the murmur of voices.

Fortunately for me, the people were too much taken up with the work on hand to look very curiously around them, and I managed to reach the churchyard-wall unnoticed. Creeping along almost on hands and knees, I got to a place where the stones had fallen away, and from whence—with but slight fear of discovery—I could watch what was going on. In the corner farthest from me four men were digging a grave, and soon a little company of people came up the road from the other side of the mountain, carrying a shrouded corpse upon a plank. Placing the plank on the ground, the bearers started hurriedly onward, doubtless to fetch the coffin which I had seen upon the road.

'How about Tommie?' I asked myself, and could only hope that in the moonlight he would pass as a stray mountain pony. But no such luck! Back came the men with the coffin, and Tommie, led by his halter! The men leading the pony called to those at the grave, who produced a dark-lantern, and were about to unstrap my bag from the saddle, when the women raised the Irish wail as they placed the body in the coffin. This was too much for Tommie's nerves; the men, who did not know his little ways, were holding him carelessly. The injured foot seemed forgotten; he reared and kicked desperately for a minute, then I heard him careering at full gallop onward down the road. There was a chorus of smothered oaths, and then the funeral was proceeded with. The sound of a monotonous Latin prayer showed me that some patriotic priest was present, and when the earth was being shovelled in, a low mournful wail again rose from the women.

Directly the grave was filled in the people dispersed; but I had a shrewd suspicion that some of them would remain in hiding upon the road to see if Tommie's rider would appear, and as I slowly crept onward, keeping as much as possible in shadow, I had an unpleasant expectation that at any minute I might have a bullet whistling by me.

After walking for about a mile, I took out my watch and with some difficulty made out the time. It was one o'clock. I had been longer at the grave-yard than I had thought. Things were looking serious. I had a good lifteen miles to do yet. No horse, and only four hours to do it in. I might be

delayed again. Casting aside my precaution, I started at a brisk run. Crack! went a gun to my right. The scoundrels were stalking me; but I paid no attention to the shot, beyond, if possible, quickening my pace. After running for some two or three miles, I was forced to pull up for breath. My riding-coat was not exactly a suitable get-up for this sort of thing. Hurriedly I tore off coat and waistcoat and stuffed them into a ditch, and then started on again as fast as I could go. I went on and on without stopping, until the ground seemed to jump up to hit my feet as I pounded on. My head grew dizzy, but I was kept up by the thought that I was going a good pace and was secure of arriving in time.

Suddenly, a voice shouted, 'Halt there!' and I found myself rather roughly collared by a policeman.

Another one, standing a few yards off, held (delightful sight) that rascal Tommie!

'Give an account of yourself,' said my captor.

Easier said than done when one has been running at the top of one's speed for miles. At last, however, I gasped out angrily:

'Hands off! I'm Mr William O'Neil.'

The policeman laughed. 'A likely story; and, pray, where's your honour's waistcoat? Come, talk sense, or hold your tongue. We have found a riderless horse, and it may be a serious business.'

'Don't I tell you, man, I'm Mr William O'Neil! That is my horse.'

'Stop that rubbish; you are a lunatic at any rate, and I arrest you.'

Before I knew what was up I was handcuffed and hauled on to a light cart. I was speechless with rage and exhaustion combined; but, seeing the cart was going my way, I lay back silently, still panting for breath.

The police in Ireland are often moved, to prevent them from being tempted into too intimate friendship with their neighbours. These men were evidently from the north, and it would be difficult to make them realise the situation.

'Take me to Sir Patrick O'Hara's,' I said at last.

'Take you to Sir Patrick's at this time of night! I'll be hanged if I do! You'll go to the Police Barracks; and if you behave yourself you'll be comfortable; and if you don't, you won't.'

I was to go to the Police Barracks, was I? That meant turning off my proper road at the end of another half-mile. I felt desperate. The second policeman was riding Tommie by the side of the cart. Now Tommie, meek as he appeared, had his temper, as I very well knew. On the floor of the cart were one or two little packages. With a sudden inspiration, I turned over one of these with my foot, and after watching for the right moment, kicked it straight at Tommie. Tommie lashed out like a good one, and touched the horse in the cart. Then we had a dance, and the cart landed in the ditch.

When those two policemen were again masters of the situation the lunatic had disappeared into the night. I was, in fact, tearing across the fields to the O'Haras' house. Souse! splash! Great Scot! if I, an Irishman born, did not go and fall into a bog! Deep in I was, up to my waist, and only saved from worse by my handcuffed hands, which clung to the last firm tuft of rushes. Here was a pretty piece of work! I knew my best chance was not to struggle but to stay still and shout. I feared I was not near enough to the house to be heard there, but there might be a cabin closer at hand.

In intervals of shouting and silence the time passed on. No answer came to my cries. I don't think, honestly, that I dwelt much on my own plight, though it was decidedly dangerous. I was picturing Theresa, fussing over Patrick's early breakfast, and merrily giving that good-bye kiss, which, though she did not know it, might so well be the last.

The birds were just beginning to twitter for the dawn, when far away I heard the sound of wheels and a horse's hoofs. Nearer and nearer it came. It must be Patrick in his dog-cart, going to the fair. As he drew nearer I heard him whistling 'Father O'Flynn' as merrily as a schoolboy. Poor, happyhearted fellow! Could I but make him hear before he got to the turn down the valley I might save him yet. But I was numb with the cold and wet, and my voice was hoarse and faint.

Still, I shouted, 'Patrick, Patrick.' Though at first he did not seem to hear me, at last, when I had almost given up hope, the horse stopped. I shouted again, and he shouted back.

'You are a respectable sort of a brother-in-law,' observed Patrick as at length, after considerable

difficulty, he dragged me on to safe ground. 'What in the world have you been up to? Handcuffed, and without your coat, and all over bog. I will take you back to your sister, and see what she says to you, young man.'

Now I was safe I kept laughing in a foolish, weak way. 'I was running to warn you of an attempt to shoot you, and the police arrested me as a suspicious character,' I said with difficulty.

'Small blame to them, considering your present appearance,' said Patrick, as he tenderly helped me to walk to his trap. Soon we were bowling back to the house; and I, secure that Theresa would not allow her husband out of her sight till we heard more, enjoyed a hot tub and a good breakfast, and then retired to bed very thankful for the rest, as I was aching from head to foot.

I had great difficulty in persuading Patrick to believe my story; he was firmly impressed with the idea it was a hoax. But after I had had some hours' sleep I woke, and found him sitting by my side.

'Your friends the police have been round,' he said. 'I laughed when I heard their story. Bravo, Tommie! He is eating his head off now in my stable. Looking for you, they chanced on other night-birds who "were wanted;" they were behind a hedge with a gun. Well, we know what that meant, old man. They did not eatch them till half-past five; and if I had not been employed elsewhere, there might have been a death in the family.'

So saying, he clapped me on the shoulder and went downstairs whistling 'Father O'Flynn' as merrily as ever.

BLACK-AND-WHITE IN NATURE.

By T. C. HEPWORTH.



ROM the gorgeously-striped rainbow to the humble floweret, Dame Nature shows what a wonderful colourist she is. Whether we glance at the animal, vegetable, or mineral kingdom, we can obtain evidence of

her prodigality of pigments, and pigments of so wonderful a quality that they defy reproduction by means of the artist's palette. The artist, indeed, is obliged to resort to contrast and other cunning devices in order to represent some of Nature's effects; and then, as he himself will reluctantly admit, he falls very far short of the ideal at which he aims.

The lovely tints which adorn the sky at morn and eve confer by reflection some of their beauty on the land below, which, clothed in its spring or summer dress of brilliant green and divers-hued flowers, already has a coat of many colours. The animal world—and more particularly the birds of tropical climes—seem to embrace in their brilliantly-coloured plumage all the tints of the rainbow.

Even in the mineral kingdom the gorgeous colours of the various metallic ores and other stones defy all attempts to imitate them, and the climax is reached when we come to deal with those minerals which are called precious stones.

Now and again, however, Nature takes a sober fit, and shuts up her colour-box, just as an artist will, by way of change, leave his palette and go to black-and-white. The brilliant hues of summer fade to the reds and russets of autumn, to be succeeded by the white-and-black of winter. But it is in the animal world that curious freaks occurcertain animals, which under ordinary circumstances are coloured, become white. As a rule, white is rather a rarity in the animal kingdom, but appears in some species as a protection. Thus seabirds, whose lives are passed so much in the neighbourhood of foaming waters, are usually partially or entirely white; and in snowy lands certain creatures will assume a white covering so soon as the winter approaches. In Norway, for example, is found the variable or mountain hare, the willow-grouse, the

ptarmigan, the stoat or ermine, the arctic fox, &c.—all these are provided with both a summer and winter costume, the former coloured and the latter white. Then there are animals up north which are permanently white, such as the polar bear, the snowy owl, and the Greenland falcon.

Quite apart from these well-established arrangements of Nature, we have many examples of that curious condition known among naturalists as albinism, or the production of an occasional white specimen of an animal which is normally either coloured or black. Colour in animals is due to pigment found in the skin, hair, feathers, &c.; in albinos the pigment is absent, and as a consequence the hair, feathers, &c. are dead white-the eyes being pink for the reason that they are colourless and the blood shows palely through the tissues. It is astonishing what pranks Nature plays with her creatures in this way. A white blackbird seems to be an anachronism, but it is by no means uncommon. A white blackcap and a white jackdaw would seem to be equally out of place; but specimens of all these can be seen any day at the British Museum, where a case of these natural freaks is exhibited. Albinism is seldom perpetuated among wild animals, possibly for the reason that, in the absence of protective pigments, the eyes of such creatures must be extremely sensitive to light. In domesticated animals the condition is more common, and every one knows how white rats and white mice are common objects of barter among schoolboys. True albinos are also found among ferrets and rabbits. It is clear that albinism, except in snowy districts, must be a disadvantageous possession to its owner, making it conspicuous to the creature upon which it prevs as well as to its Among other examples of albinism shown in the exhibits already referred to may be found a hare, a rabbit, a guinea-pig, and other small mammals; a white frog; and, what seems to be more remarkable still, a white crayfish and a white lobster. Among the birds we notice a white skylark and a white robin; while there are numerous examples of partial albinism - birds flecked with white, as if some 'prentice hand had tried to whitewash them and had only partially succeeded in his work. Albinos with white hair and pink eyes are uncommon but not unknown in the human family, and most of us have occasionally seen persons who exhibit this peculiarity.

We have seen, then, that this condition known as albinism is due to absence of pigment in certain individuals, and that examples in the animal world are not uncommon. But it is not generally known that there is an opposite condition to albinism, in which an excess of dark-coloured pigment will turn an individual black, or partially black. This state is known as melanism (from the Greek melas, black); and although not so frequent as albinism, specimens are exhibited in our National Museum. An animal may give birth to a litter of cubs; and while most are of the normal colour,

perhaps one or two are quite black, and will remain so throughout life. Here, for example, is a leopard which seems to answer the old question with regard to change of spots in the affirmative, for it looks as if it had been dipped in ink. The spots are there, but they are coal-black, on a somewhat As in the case of albinism, lighter ground. melanism is more common among domesticated animals; and this is very probably due to selective breeding, and the desire of the owners of such animals to establish a strain which shall be pure black; this has certainly been the case with cattle, horses, rabbits, fowls, &c. It also seems certain that domestic animals may show signs of melanism if improperly fed; the bullfinch, for example, is said to assume much darker plumage if given too much hempseed.

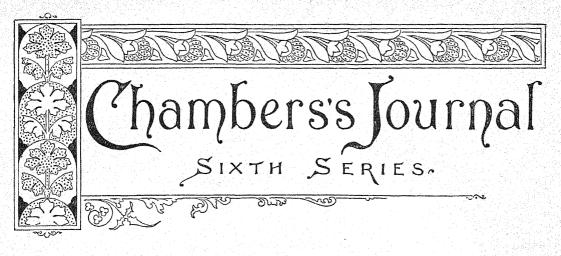
Among other examples of melanism which are exhibited at the British Museum are specimens of the wild rabbit, the common rat, and the water-vole. There is also a black squirrel, which, however, seems, for some untraced reason, to be confined to Northern Borneo. Among the birds we find a skylark, a woodcock, a snipe, and a yellow-hammer, all in the deepest mourning. The pigment of which the albinos have been deprived has been distributed among creatures already well endowed. It seems as if Nature had parodied the way in which riches are dealt out to the human family—some having none, and others more than they know what to do with.

TO THE BLACKBIRD.

What strains mellifluous, O sweet-voiced thief, Are thrilling, flute-like, from thy beak of gold, While palpitates the air with joy untold! Thy joeund lay wakes hope and mocks at grief, And seems to say, 'Be happy while you may, Taste the delights that fill the passing day; Watch not the skies for sign of coming storm, Nor shudder still at yesterday's alarn!' Or—dost thou merely whistle to thy mate, With iteration sweet, of plum or peach That, ripe and ruddy, for thy coming wait? Does thy melodious carolling but teach Thy nestlings to pursue fresh depredation With all the ecstasy of stolen pleasure, To plunge their bills with nice discrimination Deep in the hearts of my best fruity treasure?

At noon and eve I watched thee fluttering nigh, The dewy dawn beheld thee sweeping by, Like some stray satellite of vanished night, On plunder bent, yet pausing in thy flight To sing beside my window, cunning bird! That through the hush of sleep thou mightst be heard, And, as Æolian harps by winds are stirred, My heart-strings might respond with answering chords. And echo thy glad strains in happy dreams:— I seemed to hear the rush of gurgling streams, And, sweeter far, the music of fond words; Above me swung the wild rose, pink and fair, The breath of woodbine filled the summer air; I clasped kind hands, dear eyes looked into mine, Such was the magic of that voice of thine! So—feathered sybarite! Of what thou wilt—partake, I must forgive thee for thy song's sweet sake.

M. L. Addey.



BOXING WITH THE GLOVES.



HAT is described in the slang of its votaries as 'the noble art' is an institution that may be called peculiarly English. The Greeks included boxing amongst the contests at their great athletic festivals;

but it was something entirely different from what we understand by the term. It was chiefly a matter of hard hitting with stout gloves of dried ox-hide, and there is nothing in the records of the sport which indicates the clever tactics of attack and defence which English boxers have developed. An Englishman seems to have a natural instinct for the use of his fists; and for at least two centuries it has been an accomplishment by which a certain portion of the community have set great store. There is a list of champions of the English prize-ring since the very early days of last century, and its combats have enjoyed the patronage of numerous members of the aristocracy, in addition to their large and motley following of the lower orders. The better judgment of the nation has for many years past been offended by the brutality of these encounters; but open disapproval has always been qualified by a large element of secret interest in their results. The most historic meeting of the kind was that which took place at Farnborough, just over thirty years ago, between Tom Sayers, an English pugilist of extraordinary pluck and endurance, and an American named Heenan, who was popularly known as 'The Benicia Boy.' Those who remember the circumstances will admit that few events in the world of sport have roused such great or widespread excitement amongst all classes. As an evidence of interest in unexpected quarters, it was pointed out that one of the Church papers, published on the following day. contained a paragraph which, while condemning the whole affair with unstinting displeasure, did, nevertheless, not omit to inform its readers of the

Prize-fighting has always been illegal, and so vigilant are the authorities now in carrying out

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the law that a 'mill' of the old-fashioned sort is rather uncommon. But, although other times bring other manners, pugilism itself is still with us in altered guise. The 'Rules of the London Prize-Ring' still survive as a curiosity in sporting handbooks, but side by side with them will be found the 'Marquis of Queensberry's Rules,' under which boxing contests are still carried out regularly in different parts of the country. These 'glove-fights,' as they are called, are less prolonged and more humane in their conditions than the prize-fights of old; but their real character is often essentially the same. The men fight, not in the open air as formerly, but in some building, such as a club, and the spectators are comparatively select, by reason of the high prices charged for admittance. Five or ten guineas is the usual cost of a ticket for any encounter which is regarded with particular interest, and there are always hundreds willing to see the entertainment upon such terms. Betting and racing men, doctors, lawyers, members of the Stock Exchange, sprigs of nobility, merchants and manufacturers, may all be recognised at the functions held by the National Sporting Club or the Bolingbroke Club in London, or the Olympic Club in Birmingham; while the general public await at the doors, in a more or less unwashed multitude, the earliest tidings of victory. The combatants meet in a fenced ring of fourteen by twenty-four feet square. A few hours previously they have each been weighed, for it is one of the conditions that neither shall exceed a certain figure, and they have spent weeks of training with a view to-'getting off flesh' as well as developing muscle. They are supplied with gloves of four ounces each (considerably lighter than the boxing-gloves found in a gymnasium), and these are the only coverings to be found on the upper part of their bodies. They are required to box a certain number of rounds, and at the close the referee will decide which has gained the majority of points over his opponent. Each round lasts for three minutes, and there is an interval of one [All Rights Reserved.] DEC. 18, 1897.

minute, during which both are rubbed down and fanned and receive other stimulating attentions from their seconds. Very often the contest is brought to an end in summary fashion long before the stipulated number of rounds have been transacted. If either should be knocked down by a blow, he is allowed ten seconds in which to regain his feet and resume the struggle; if he should fail to do so he is 'counted out,' and his opponent is declared the victor. This is what is meant by the often-used expression, 'the knockout,' and pugilists are always on the alert to effect such a coup. There are three special blows which are relied on to disable an opponent in this way, and the man who is taken unawares by any of them can seldom regain his footing. One is delivered under the heart, another just on the midriff, and the third on either side of the chin. The collapse caused by either of the first two can be readily understood; the effects of a heavy blow on the jaw are not so generally known. Each side, however, is the seat of an important collection of nerve-centres, and a shock transmitted to these inevitably leaves the victim in a dazed condition, placing him quite at the mercy of his antagonist.

The position held by the 'knock-out' is alone sufficient to give these affairs a character which must be described as brutality. Yet for people of strong nerves they seem to be not without a keen fascination. The physique of the men is often magnificent, and evokes the highest admiration; their quickness and endurance both testify to perfect training, which also renders the effects of 'punishment' much lighter than they appear on the surface. The skill attainable in boxing is marvellous and beautiful to watch, and the coolness of temper which is a vital requisite is not without a certain moral quality. All the feelings of animal enthusiasm, which is not necessarily vicious, are abundantly called forth in the spectators. But after everything has been said in its favour, 'glove-fighting' is really prizetighting revived with very slightly modified conditions and less repulsive associations. It is the same in substance, and whatever justifies the suppression of the one applies equally to the other. It may be asked why the law distinguishes between them. While displays of scientific boxing are quite harmless and unaffected by anything in the statute-book, it is clearly recognised that a 'glove-contest' is on the same legal footing as a prize-fight as soon as it develops the same characteristics of excessive violence; yet these contests are held regularly and publicly with practically no hint of interference. The explanation lies in those secret inclinations of the popular mind to which reference has already been made. An attempt was made to prosecute the principals in one notorious case ten years ago; and although the evidence was as clear as possible, the London jury would not agree to a conviction. There is little doubt that the same result would follow other attempts to put the law in force; and, recognising the strong and evident bias of a section of public feeling, the authorities have allowed the question to drop. There is, therefore, in most large towns a considerable number of professional pugilists, who earn their living by such exhibitions as well as by teaching boxing and by giving protection occasionally to persons who think themselves in danger of assault. On most racecourses they are to be found in attendance on betting men who carry large sums of money on their persons, and they are often privately employed by those responsible for entertainments where a rowdy element is to be expected amongst the audience. It is their due to say that they are generally to be found on the side of law and order, and they are for the most part on excellent terms with the

Apart from these questions, the justification of boxing both as a useful accomplishment and as a healthful exercise is complete. That a man should be able to defend himself is not only reasonable, but in less civilised conditions would be a matter of constant necessity. The value of a scientific knowledge of fisticulfs is recognised both in the army and in the police service, and there is no walk of life (as may be illustrated from the House of Commons!) in which it may not help at a pinch. Amongst our rougher city populations a good deal of physical violence is still intermingled with daily life, and it has been remarked from the magistrates' bench and other quarters that, if disputes are to be settled by personal combat, a manly and straightforward use of the fists would be far preferable to the employment of boots, belts, missiles, and lethal weapons, to which the denizens of the slums resort with appalling readiness. So forcibly is this consideration felt in some quarters that a High Church clergyman in a mission district in Birmingham has devoted himself with much energy to the instruction of his young roughs and embryo criminals in boxing, and reports encouraging results in the improvement of temper, self-control, sense of fairness, and peaceable disposition generally. As a physical training it stands amongst the very finest of sports. It engages every part of the body, and is the severest test of agility and concentration. It reveals most wonderfully the resources of human physique, and in its true functions well merits a tribute of praise and encouragement.

JOHN BURNET OF BARNS.

CHAPTER IV .-- I GO TO THE COLLEGE AT GLASGOW.



Y this time I had grown a great, stalwart lad, little above the middle height, but broad and sinewy. I had made progress in all manly sports, and could fling the hammer almost as far as the Manor black-

suith, while in leaping and running I had few rivals among lads of my age. Also, I was no bad swordsman, but could stand my own against all the wiles of Tam Todd, and once even disarmed him, to his own unspeakable disgust. In my studies, which I pursued as diligently as I could with no teachers and not over-many books, I had made some little advance, having read through most of the Greek tragedians and advanced some distance in the study of Plato; while in the Latin tongue I had become such an adept that I could both read and write it with ease.

When I had reached the mature age of eighteen, who should come up into our parts but my famous relative, Master Gilbert Burnet, the preacher at St Clement's in London, of whom I have already spoken! He was making a journey to Edinburgh, and had turned out of his way to revive an old acquaintance. My father was overjoyed to see him, and treated him to the best the house could produce. He stayed with us two days, and I remember him still as he sat in a great arm-chair opposite my father, with his broad velvet cap, and gray, peaked beard, and weighty brows. Yet when he willed, though for ordinary a silent man, he could talk as gaily and wittily as any town gallant; so much, indeed, that my father, who was somewhat hard to please, declared him the best companion he ever remembered.

Before he left, Master Burnet examined me on my progress in polite learning; and finding me well advanced, he would have it that I should be sent forthwith to Glasgow College. He exacted a promise from my father to see to this, and left behind him when he departed letters of introduction to many of the folk there, for he himself had at one time been professor of divinity in the place. As for myself, I was nothing loth to go and see places beyond Tweeddale and add to my stock of learning; for about this time a great enthusiasm for letters had seized me (which I suppose happens at some time or other to most men), and I conceived my proper vocation in life to be that of the scholar. So it was settled that I should ride to Glasgow and take lodgings in the town for the sake of the college classes.

I set out one November morning, riding Maisie alone; for no student was allowed to have a servant, nor any one below the degree of Master

of Arts. The air was keen and frosty, and I rode in high fettle by the towns of Biggar and Lanark to the valley of the Clyde. I lay all night at Crossford in the house of a distant relative. Thence the next day I rode to Hamilton, and in the evening came to the bridge of the Clyde at Glasgow. I took up my abode in the Vicar's Alley, off the High Street, at the house of one Mistress Macmillan, who had come originally from the lowlands of Galloway. Then I presented myself to the Principal and Regents of the college, and was duly admitted, putting on the red gown, the badge of the student class, than which I believe there is no more hideous habiliment.

The college in those days was poor enough, having been well-nigh ruined by the extortions of Lord Middleton and his drunken crew; and it had not yet benefited by the rich donations of the Reverend Zachary Boyd of the Barony Kirk. Still, the standard of learning in the place was extraordinary high, especially in Dialectic and Philosophy—a standard which had been set by the famous Andrew Melville when he was a professor in the place.

Across the High Street were the college gardens and green, pleasant orchards, where the professors were wont to walk and the scholars to have their games. Through the middle ran the clear Molendinar Burn, so called, it was said, by the old Romans, and here I loved to watch the trout and young salmon leaping. There was a severe rule against scholars fishing in the stream, so I was fain to content myself with the sight. For soon a violent fit of home-sickness seized me, and I longed for the rush of Tweed and the pleasant sweep of Manor; so it was one of my greatest consolations to look at this water and fancy myself far away from the town.

No one of us was permitted to carry arms of any kind, so I had to sell my sword on my first coming to the town. This was a great hardship to me, for whereas when I carried a weapon I had some sense of my own importance. now I felt no better than the rest of the unarmed crowd about me. Yet it was a wise precaution, for in other places where scholars are allowed to strut like cavaliers there are fights and duels all the day long, so that the place looks less like an abode of the Muses than a disorderly tavern. Nevertheless there were many manly exercises to be had, for in the greens in the garden we had trials of skill at archery and golf and many other games of the kind. At the first-mentioned I soon became a great master, for I had a keen eye from much living among woods and hills, and soon there was no one who could come near me at the game. As for golf,

I utterly failed to excel; and indeed it seems to me that golf is like the divine art of poetry, the gift for which is implanted in man at his birth or not at all. Be that as it may, I never struck a golf-ball fairly in my life, and I misdoubt I never shall.

As for my studies, for which I came to the place, I think I made great progress. For after my first fit of home-sickness was over I fell in with the ways of the college, and acquired such a vast liking for the pursuit of learning that I felt more convinced than ever that Providence had made me for a scholar. In my classes I won the commendation of both professors; especially in the class of Dialectic, where an analysis of Aristotle's method was highly praised by Master Sandeman, the professor. This fine scholar and accomplished gentleman helped me in many ways, and for nigh two months, when he was sick of the fever, I lectured to his class in his stead.

In the midsummer months I went down to Tweeddale again, where I astonished my father and all in the place with my new learning, and also grieved them. For I had no love for fishing. or shooting; I would scarce ride two miles for the pleasure of it; my father's tales, in which I delighted before, had grown tiresome; and I had no liking for anything save bending over books. When I went to Dawyck to see Marjory, she knew not what had come over me, I was so full of whims and fancies. 'Oh John!' she said, 'your face is as white as a woman's, and you have such a horrible cloak. Go and get another at once, you silly boy, and not shame your friends.' Yet even Marjory had little power over me, for I heeded her not, though aforetime I would have ridden post-haste to Peebles and got me a new suit and painted my face if I had thought that thereby I would pleasure her.

When the autumn came again I returned to college more inclined than ever for the life of a scholar. I fell to my studies with renewed zeal, and would doubtless have killed myself with work had I not been nearly killed with the fever, which made me more careful of my health. And now, like the weathercock I was, my beliefs shifted yet again. For, studying the schoolmen, who were the great upholders of Aristotle, I found in them so many contradictions and phantasies which they fathered on their master that, after reading the diatribes of Peter Ramus and others against him, I was almost persuaded that I had been grievously misled. Then at last I saw that the fault lay not in Aristotle but in his followers, who sought to find in him things that were beyond the compass of his thought. So by degrees I came round toward the new philosophy which a party in the college upheld. They swore by the great names of Bacon and Galileo and the other natural philosophers; but I hesitated to follow them, for they seemed to me to disdain all mental philosophy, which, I hold, is the greater

study. I was of this way of thinking when I fell in one day with an English book, a translation of a work by a Frenchman, one Renatus Descartes, published in London in the year 1649. It gave an account of the progress in philosophy of this man, who followed no school, but, clearing his mind of all presuppositions, instituted a method for himself. This marked for me the turning-point; for I gave in my allegiance without hesitation to this philosopher, and ever since I have held by his system with some modifications. It is needless for me to enter further into my philosophy, for I have by me a written exposition of the works of this Descartes, with my own additions, which I intend, if God so please, to give soon to the world.

For two years I abode at the college, thinking that I was destined by nature for a studious life, and harbouring thoughts of going to the university of Saumur to complete my studies. I thought that my spirit was chastened to a fit degree; and so no doubt it was, for those who had feared me at first on account of my heavy fist and straightforward ways now openly scoffed at me without fear of punishment. Indeed, one went so far one day as to jostle me off the causeway, and I made no return, but went on as if nothing had happened, deeming it beneath a wise man to be distracted by mundane trifles. Yet, mind you, in all this there was nothing Christian or like unto the meekness of our Master, as I have seen in some men, but rather an absurd attempt to imitate those who would have lived very differently had their lot been cast in our hot and turbid days.

How all this was changed and I veered round of a sudden to the opposite I must hasten to tell. One April day towards the close of my second year I was going up the High Street toward the Cathedral with a great parcel of books beneath my arm, when I heard a shouting and a jingling, and a troop of horse came down the street. I stood back into the shelter of a doorway, for soldiers were wont to bear little love to scholars, and I did not care to risk their rough jests. From this place I watched their progress, and a gallant sight it was. Some twenty men in buff jerkins and steel headpieces rode with a fine clatter of bridles and clank of swords. I marked their fierce, sun-brown faces and their dare-devil eyes as they looked haughtily down on the crowd as on lower beings; and especially I marked their leader. He sat a fine bay horse with ease and grace; his plumed hat set off his high-coloured face and long brown curls worn in the fashion of the day; and as he rode he bowed to the people with large condescension. He was past in a second, but not before I had recognised the face and figure of my cousin Gilbert.

I stood for some minutes staring before me, while the echoes of the horses' hoofs died away down the street. This, I thought, is the destiny

of my cousin, only two years my elder, a soldier, a gentleman, a great man in his place; while I am but a nameless scholar, dreaming away my manhood in the pursuits of a dotard. I was so overwhelmed with confusion that I stood gaping with a legion of thoughts and opposing feelings running through my brain. Then all the old fighting spirit of my house rose within me. By Heaven! I would make an end of this. I would get me home without delay; I would fling my books into the Clyde; I would go to the wars; I would be a great cavalier; and, by the Lord! I would keep up the name of the house. I was astonished myself at the sudden change in my feelings, for in the space of some ten minutes a whole age had passed for me, and I had grown from a boy to some measure of manhood. I came out from the close-mouth with my head in the air and defiance against all the world in my eye.

Before I had gone five paces I met the lad who had jostled me aforetime, a big fellow of a raw-boned Ayrshire house, and before he could speak I had him by the arm and had pulled him across the way into the college gardens. There I found a quiet, green place, and plucking off my cloak, I said, 'Now, Master Dalrymple, you and I have a small account to settle.' With that we fell to with our fists, and in the space of a quarter of an hour I had beaten him so grievously that he was fain to cry for mercy. I let him go, and with much whimpering he slunk away in disgust.

Then I went into the town and bought myself a new blade and a fine suit of clothes—all with the greatest gusto and lightness of heart. I went to the inn where Maisie was stabled, and bade them have her ready for me at the college gate in an hour. Then I bade good-bye to all my friends, but especially to Master Sandeman, from whom I was loth to part. My books I did not fling into the Clyde, as at first I proposed, but left injunctions that they were to be sent by the carrier. So, having paid all my debts—for my father had kept me well appointed with money—I waved a long farewell, and set out for my own country.

THE FATE OF SIR WALTER SCOTT'S MANUSCRIPTS.

PART II.



ADELL'S manuscripts appear to have been removed and placed in the oak cabinet of his mansion at Ratho House, as we learn from a memorandum dated 28th July 1846, three years before his death. Of the

fragment of Waverley, he mentions that it bore the watermark of 1810, and was evidently part of the MS. now in the Advocates' Library. The portion of Ivanhoe was purchased from Mrs Terry; it had been sent during its composition to her husband in order to see how it could be dramatised. It was reported that after Mr Cadell's death these MSS. had been offered for private sale for £2000. Eventually they were sold by Messrs Christie, Manson, & Woods in July 1867, and brought 1255 guineas. The following are the prices and purchasers:

강화되었다고 하는 사람이 되었다.	Price.		Purchaser.
Marmion	191	gs.	Mr Harvey.
Lady of the Lake		Ħ	Mr F. Richardson.
Vision of Don Roderick	37	11	Mr F. Richardson.
Rokeby	130	11	Mr Hope Scott.
Lord of the Isles	101	11	Mr Hope Scott.
Introductory Essay on Popular Poetry		11	Mr F. Richardson,
Auchindrane	27	11	Messrs Nixon & Rhodes.
Anne of Geierstein	121	11	Mr Hope Scott.
Waverley and Ivanhoe	130		Mr Hope Scott.
Tales of a Grandfather.	145	11	Mr F. Richardson.
Castle Dangerous	32	11	Mr F. Richardson.
Count Robert of Paris.	23	11	Mr Massey.
	1255	gs.	

With the exception of the five volumes of correspondence which Mr Cadell had stipulated should

not pass out of his family, the remaining volumes were sold at the same place on July 9, 1868:

	Purchaser,
Quentin Durward£142	Mr Toovey.
The Abbot 50	
Chronicles of the Canongate, 1st } 51	Mr Melville.
Woodstock	
The Betrothed	Mr Lauder.
The Talisman	Mr Lauder.
St Ronan's Well 120	Mr Lauder.
Vision of Don Roderick	Mr A. W. Elvick

These, with the sale of proof-sheets of the original editions with Scott's corrections, made £1074. The Pirate as has already been mentioned, was retained; also Redgauntlet and the five volumes of letters which are now in the possession of Cadell's eldest daughter, the Dowager Lady Liston Foulis. The note on Redgauntlet runs: 'This, the original manuscript of Redgauntlet, I received as a gift from Sir Walter Scott at Abbotsford on 9th April 1831.—Rob. Cadell, 1834.' Sir James T. Gibson-Craig became the owner of the Fair Maid of Perth for £105. The above portion of Tales of a Grandfather was sold at Sotheby's in 1897 for £106; the Introductory Essay on Popular Poetry, &c., for £62 (now in the hands of Mr W. Brown. bookseller), and Castle Dangerous for £32. Ronan's Well was in the hands of Mr A. Skene in 1871. At the sale of Scott relics belonging to Mr John A. Ballantyne (son of James Ballantyne) in 1848, the MS. of The Black Dwarf was purchased by Mr Stillie, on commission for Sir William Tite, for £28, 17s. 6d.; the author's proof-sheets of the

Life of Napoleon, in nine volumes, by Mr Taylor, for £47, 5s.; the proofs of Woodstock, Nigel, Quentin Durward, Tales of the Crusaders, Ivanhoe, Peveril, and Pirate were purchased by Mr Taylor for £43, 1s. Messrs Blackwood purchased the Letters on Demonology for £2, 10s.

On 23d July 1896 two further volumes, part of the Cadell trust-estate, were sold at Sotheby's. These were Don Roderick and Mother and Son.

The memoranda which Scott so kindly sent to Robert Chambers towards a new edition of the Traditions of Edinburgh is very regularly written in three folio pages, without an interlineation or a blot. That and several autograph letters are now in the possession of Mr C. E. S. Chambers. Amongst a vast number of other valuable manuscripts left to Edinburgh University by the late David Laing are portions of Kenilworth and the Legend of Montrose, a packet of holograph letters of Walter Scott, W.S., father of Sir Walter, and W. Laidlaw's narrative of his first meeting with him.

In his general preface to the Waverley Novels, written in 1829, Scott has told the interesting story of the composition of Waverley, and how he came to forsake poetry for prose narrative. In the year 1805 he wrote about one-third of the first volume, and it was advertised to be published by John Ballantyne. Having gone as far as the seventh chapter, he showed the work to a critical friend, who gave an unfavourable opinion of it, and this made him unwilling to test public opinion, and perhaps risk the loss of the poetical reputation he had already achieved. The work was thrown aside in the drawers of an old writing-desk, which, on coming to Abbotsford in 1811, was placed in a lumber garret and was forgotten. Now and again his thoughts returned to the unfinished story; and the rising fame of Miss Edgeworth in depicting Irish character worked some emulation in him to do the same for Scotland. By a happy accident, in searching for some fishing-tackle, the long-lost manuscript was discovered and quickly completed. It was published by Constable on 7th July 1814, and within five weeks, although in the dead season, 1000 copies had been sold. A second edition was ready in August, a third and fourth in October and November. A copy of this first edition sometimes fetches £20.

A correspondent of Robert Chambers related that Daniel Lizars had told him how he had accidentally seen the manuscript of Waverley some years before it appeared. He was quite aware at the time that it was in Scott's handwriting, so that more people must have shared the secret than is generally supposed. It appears to be the only volume in folio MS.; the rest are all quartos of uniform height.

This manuscript of Waverley, purchased in London at the sale of Constable's manuscripts by Mr Wilks for £18, and resold to Mr Hall for £42, was eventually in 1850, given to the Advocates' Library, Edinburgh, and there reposes in a glass case. At

first Mr Hall intended to leave it as a legacy, but changed his mind, and handed it over during his lifetime to the Advocates' Library, on condition that it was shown to the public. He had it bound in green leather, in imitation of the other manuscripts, but with blank paper inserted corresponding to the gaps in the volume when compared with the printed work. The total number of leaves is 210. Compared with the print of the first edition (1814), this manuscript contains what corresponds to 579 pages of print, and has lost what nearly corresponds to 515 pages of print. The first, or quarto, portion of the manuscript is watermarked 1805; the folio portion is watermarked At the end of Part II. of postscript the words 'Our Scottish Addison' are erased, being required in the dedication that followed. leaves forming the opening chapter were bought by Mr Hope Scott at Cadell's sale in 1867, and were at Abbotsford in 1871. It seems a pity that these should not be added to the manuscript of Waverley in the Advocates' Library. We believe that about two years ago the Advocates' Library was offered about six leaves of Waverley for £60, but refused to purchase.

On March 12, 1894, there was sold at Sotheby's, London, the original manuscript of Scott's Nupoleon, the property of the Hon. Mrs Maxwell Scott, Abbotsford. The two thick post-quarto volumes, bound in russia leather, contain about 1000 pages, very minutely written. This prize became the property of an Edinburgh collector, Mr W. Moir Bryce, at the price of 198 guineas. It appears complete except for some leaves in Chapter XIV. and the whole of Chapter XV. There are many corrections and interpolations on the left - hand pages. The same collector has the manuscript of Count Robert of Paris, inscribed with the name of its former possessor, 'Robert Cadell, 1834.' Only a portion of this story, written in the decadence of Scott's powers, is in his own handwriting; he had called in the aid of Mr and Mrs William Laidlaw for its completion. The same purchaser has the original manuscript of Scott's review for the Quarterly of Kirkton's History of the Church of Scotland, with an inscription from 'John Murray to Robert Cooke, with kind regards, Sept. 1888,' as also the review of an essay On Military Bridges, by Colonel Sir Howard Douglasboth from the Cooke sale. Two other prizes of great value are possessed by Mr Bryce-the service-book of Holyrood Abbey, bound in oak and leather, for which he paid £250, and the original manuscript of Allan Ramsay's Gentle Shepherd, which cost him £104. Honest Allan, as is obvious from the whimsical preface in his own handwriting, had a good opinion of his performance, as appears also from the note at the end giving date and day and hour in the evening when he finished it. This is from the Boswell collection, and has a note in the handwriting of Sir Alexander Boswell relating how it came into his possession.

Scott's Life of Napoleon had its origin in a conference with Constable in May 1825. 'The Grand Napoleon of the realms of print,' as Scott facetiously dubbed his publisher, whose brain was then seething with new schemes, had struck out the idea of issuing periodically the series of cheap volumes which were afterwards realised in Constable's Miscellany. Constable's first notion was to take the field, at Scott's suggestion, with a 'Life of the other Napoleon,' in four volumes, the series to be sandwiched with the novels by the author of Waverley. Scott had commenced work in June with a short preliminary sketch of the French Revolution, the events of which belonged to his own time. Constable poured in material to 39 Castle Street until Scott's little parlour became 'more like an auctioneer's premises than an author's;' so that he was fain to say:

How my fancy could prance
In a dance of romance!
But my house I must swap
With some Brobdingnag chap,
Ere I grapple, God bless me, with Emperor Nap.

The introduction proved so long that Constable soon saw that four volumes would never complete the work. Scott's Journal shows how he toiled at this task during the months of 1826. This and the Chronicles of the Canongate were in progress together. The commercial crisis and failure of Constable and Ballantyne only caused him to stoop and bear a heavier load, assuming the debt of Ballantyne & Co. He now led a life of toil and seclusion from company, rarely dining out or even receiving a single guest at home, while he seemed to grudge every minute that he was not at his desk. A visit to Paris for information cost him about £200. The damp sheets of a French inn were remembered by severe after-fits of rheumatism, and the growing sluggishness of his blood and increasing lameness became marked, while his handwriting was more cramped and confused. His Journal contains such entries as 'Worked hard to-day,' or 'Uninterrupted to-day, and did eight leaves,' which was equal to from four to five of the closely-printed pages of the original edition of his Bonaparte. Another day he equalled twenty-four pages of print. Reluctantly he had to make up his mind to nine thick and closely-printed volumes. The story he thought so interesting in itself 'that there

is no fear of the book answering. Superficial it must be, but I do not care for the charge. Better a superficial book which brings well and strikingly together the known and acknowledged facts, than a dull, boring narrative, pausing to see farther into a millstone at every moment than the nature of the millstone admits.' Ballantyne discovered in the proof-sheets a whole passage of the history which had been repeated.

In his Journal he wrote: 'But I am "Nap. Bon." again, which is always a change, because it gives a good deal of reading and research, whereas Woodstock and such-like, being extempore from my mother-wit, is a sort of spinning of the brains, of which a man tires. After all, I have fagged through six pages, and made poor Wurmser lay down his sword on the glacis of Mantua-and my head aches-my eyes ache-my back aches-so does my breast-and I am sure my heart aches-what can Duty want more?' He told Mr Adolphus that 'he could have done it better if he could have written at more leisure, and with a mind more at ease.' In addition to the commercial ruin in which he had been plunged-for he was but working for his creditors—came the death of his wife. He lived the life of a hermit for the most part, save attending the Court five days in the week. Lockhart believes that this task barely occupied him more than twelve months. The result of this prodigious activity in the midst of 'pain, sorrow, and ruin' was munificent for his creditors, as the first and second editions produced £18,000; Woodstock realised £8000. An amanuensis who assisted him for a short time says that on some days he worked from 6 A.M. till 6 P.M., without interruption, save for breakfast and dinner. While he was dictating, his thoughts flowed freely; indeed he carried on two trains of thought at one time, dictating and composing the passage before him while preparing at the same time for what was to come.

Sir William Stirling-Maxwell has said that he never took down a volume of Scott's writings published in or after 1826 without thinking that they, like the water from the well of Bethlehem which David refused to drink, represented 'the heart's blood of a brave man's life.' Could he have handled the Napoleon MS. he might have said this with even greater truthfulness.

THE GURNARD ROCK.

CHAPTER III.



ABRIEL LOWRY soon began to feel the awkwardness of the situation. It was not to his liking to sit thus face to face with the man he was presently to fight; the enforced companionship seemed intolerable.

He offered to take one of the oars, so that he might turn his back on his enemy; but Tregenna said, 'Niver mind; us'll catch a breeze when we'm clear o' the Point.' And his voice and manner were suavity itself. Perhaps he, too, realised the absurdity of the position, for there was a good-humoured gleam in his eyes.

Lowry, as he scowled at his adversary, inwardly resented the man's serenity of countenance; he felt that it was outrageously out of place. The occasion demanded some ferocity of aspect, or at least a decent stolidity; and this smiling geniality was an

affront in itself. He stuck his pipe grimly between his teeth, and fumbled vainly in his pockets for tobacco. Tregenna, observing his dilemma, flung his own pouch across and said simply, 'You'm welcome.' This civility only increased Gabriel's discomfort; he was doubtful whether he could accept the tobacco with grace, or refuse it without churlishness. Finally, he filled his pipe, and returned the pouch with a nod of acknowledgment. He puffed vigorously, as though he would fain blow a veil of smoke between himself and the intolerable smile of his opponent.

It was a great relief when the sail was hoisted and Tregenna changed his position. There was a fair wind, and they made rapid headway, and were soon abreast of Tregulva Head, the great black promontory at whose base the big seas break—and

the ships sometimes.

'The last time I was on the Gurnard,' said Tregenna, lighting his own pipe, 'was February. There's serpentine splinters to be picked up on the rock different to what you can find in the cove or on the mainland—greeny stones, wi' veins o' bliddy red. I carr'd some o' they home to my son Jan. My son Jan's 'prenticed to Josiah Creed the serpentine-worker, an' he's getting on famous. Us'll take wan or two o' they greeny stones back with us in the boat; they'm good for cannel-sticks, an' paperweights, an' sich trade.'

Lowry did not appreciate the man's conversation any more than he liked his demeanour; he felt it was utterly inappropriate. The circumstances required a stern silence; he could have suffered threats or curses without further wrath; but here was this irritating fellow babbling of greeny stones!

It was a glorious morning, and Tregenna lolled contentedly, and blew his smoke skyward with an air of appreciation and gratitude; but Lowry crouched as he sat, and spat between his knees. They sailed past the romantic little cove of Gullion, with its fantastic rocks and islets glowing in the summer sea like an archipelago in Fairyland.

'My son Jan,' resumed Tregenna, 'hath cut the Longships out o' stone, an' 'tis 'xactly like lighthouse, rocks, an' all. There's to be a serpentine pulpit in Tregartha church to the mimory o' Squire Vivian, an' Parson Trevennick says my son Jan's

to cut wan o' the panels.'

Lowry did not vouchsafe a reply to any of these observations, and whenever he spoke regarding the management of the boat, it was in curt monosyllables.

The Gurnard Rock was now in sight; twice a day the tide covers it, and twice a day it emerges an island from the sea. Its remote resemblance to the fish from which it derives its name is only perceptible at very low water and from a southerly point of view. It lies half-a-mile from the land, south-west of the light on Trevasse Point.

As they neared the rock the topmasts of a sunken vessel were descried at the north-eastern extremity of the little island. Six weeks before,

the brig *Hirondelle* of Havre was driven in a gale on the Gurnard, and had gone down with all hands. The two slender masts now rose from the placid water like reeds in a pond.

'Tis a wonder that riggin' hathu't broke away yet,' said Tregenna, 'for there's a purty strong

current there.'

To which Lowry responded, in the one speech he made during the voyage, 'Iss,'tis strange. I should ha' thought her'd a-gone to splinters in two tides.'

They lowered their sail when they approached the reef, and Lowry took the oars, while Tregenna drew off his boots and stockings to wade, saying to his companion, 'Niver mind thy boots; I'll beach her.'

So they ran their boat into the pebbles at the only possible landing point, Tregenna wading kneedeep and pulling her in, while Lowry leapt dryfooted ashore. Then together they hauled the boat up the ridge of pebbles.

'There! that's wan of they stones!' cried Tregenna, picking up a fragment of rock that had not yet been worn to pebble smoothness, and dipping it in a pool, displayed its wet colours. 'Tis green mainly, but there's black and gray in it, an' the rid rins with the white; 'tis like jade an' agate an' onyx all in wan, with a strake o' cornelian; 'tis fit for a king's ornament when 'tis polished, an' my son Jan'll turn a goblet out o' thicky stone that'll be worth fifteen shillings.'

He deposited his treasure in the bottom of the boat, and together they rambled over the one acre of island, searching for precious pebbles. Lowry against his will found himself drawn into the quest, and it was with something akin to pleasure that he picked up a big stone even more splendid than the first and carried it to the boat.

Round Trevasse Point there have in sight a huge ironclad, steaming west—an unwonted spectacle so near the shore; and the two men, spell-bound, watched the passing of the great ship.

Then Tregenna, turning suddenly to the other, cried, 'Now for this fight—for time's going, an' the tide's running swift.' And he flung his cap on the ground and rolled up the sleeves of his guernsey.

Lowry, tossing his cap beside the other, said, "Tis bad footing for naked feet; better put on thy boots."

'No odds for that!' answered Tregenna.

'Then us'll fight equal,' said Gabriel, drawing off his own boots. Then facing the other, he continued with a frankness that was strange to him, his countenance clearing like a sky after storm: 'There's wan thing to be said to 'ee, John Tregenna; whether I'm best man, or thee, in this yer fight, out o' the fight thee'rt the best man by a long sight, an' I'm sorry I struck 'ee—cruel sorry.'

What answer Tregenna would have made to this admission cannot be chronicled, for his eyes were fixed on the water, and he cried in sudden consternation, 'The boat!'

And there, a good hundred yards from the rock, buoyant on the inflowing tide, drifted their boat.

A subsidence of the pebbles had brought it to the water's edge, and the tide had crept in and lifted it; and while they stood watching the mighty vessel that betokened the immunity of the realm, their own little ark of safety was bobbing unregarded on the sea.

The empty boat danced upon the sun-smitten waters as they watched her like a thing consciously free of oar and tiller. For a minute there was a

significant silence; then Lowry spoke:

"Tis a terrible judgment on fighting—in halfan-hour the Gurnard 'll be covered. Can 'ee swim, John Tregenna?'

'Iss, a bit; but not far in that current.'

'Ay, 'tis worse than broken water,' said Lowry, 'an' stronger than it looks; 'tis a nasty bit, to be sure!'

'There's no chance of a boat from the shore,' said Tregenna, 'for there's no fishing hereabouts, an' 'tis too far to signal the Channel shipping.'

'Iss, too far; they'd niver heed our motions—'twid be like the antics o' emmits.'

Minute by minute the area of the reef diminished; every wave altered the geography of the little island; isthmus, promontory, bay, appeared and disappeared, and the one acre of dry rock had shrunk to half.

Then a strange thing happened to the boat. It had been carried in the direction of the sunken brig, and after gyrating in the cross-currents, was now drifting straight on to the emergent topmasts. Its bow struck the protruding yard of the mizzen, and, slowly veering round, it was caught in a triangle of mast and spar and rope.

'Tis surely catched in the riggin',' cried Tregenna; for both were watching the truant boat.

'Surely 'tis!' answered Lowry; and when the boat showed no sign of resuming its abandoned career, he continued slowly: 'Tis a brave swim, but I'll try it. The distance is nought, but I know that ugly watter—it rins swift, an' there's a draggin' weight in it; an' there's a whirl that swayeth 'ee round an' round. Did 'ee see how the boat spinned? I'm longer in the limbs than thee, John Tregenna, an' I reckon I'm spryer in the watter. You bide here, an' I'll swim for the boat.'

While Lowry stripped, Tregenna said, 'If 'tis to be that us drown, I'd ha' wished that us washed in together; not thee wan place an' me another, for folks to interprit evil, but strapped an' buckled wan to another for a sign an' token that there was peace betwixt us at the finish.'

To which Lowry replied phlegmatically, 'Keep yer eye on they clothes o' mine, an' doan't 'ee let the tide float 'em.'

Gabriel walked in stalwart nakedness to the edge of the rock, and took the deep water with a plunge. He swam warily, with a steady breast-stroke, not making direct for the boat, but seeking by a detour to avoid the whirl. He made good progress at first; but when he neared the troubled water, Tregenna, who watched every stroke, saw that he laboured

painfully, and there were several minutes when his head appeared stationary, and man and current seemed equally matched. However, he struggled through the dangerous eddies and reached the placid water beyond, and had covered about two-thirds of the distance, when, to the dismay of swimmer and watcher, the tide lifted the boat clear of the impeding rigging, and it drifted away past all possibility of recapture.

Lowry swam on towards the rigging of the brig—he could do no other. He reached one of the masts, and after a few moments of gasping exhaustion he clambered to the yard. The Gurnard Rock had now diminished to a triangular patch that a cutter's mainsail might have covered, and Tregenna stood thereon waving his hand in greeting. It was evident that the rock would be completely submerged in a few minutes. The two men were within easy hail of each other, and Lowry shouted:

'You must swim for your life!'

'Ay, ay, I'm coming!' responded the other as he made ready.

. 'You must strip!' cried Lowry; 'strip! Every

rag'll be a drag on 'ee.'

But Tregenna did not strip. He had little hope of reaching the refuge of the rigging. He was not the swimmer the other was, and he knew it. If drowning was to be his fate, he would rather not be cast ashore naked and unseemly, but clothed and decent, wearing the garments of his wife's knitting.

He swam steadily, and it was Lowry's turn to watch. It was soon evident that he would never cope with the current, and Lowry, with a shout of succour, dropped into the water and made towards him.

Then Gabriel Lowry did a mighty piece of swimming; the other had already gone under twice, and was floundering aimlessly when Lowry clutched him at the neck. Tregenna was helpless; his limp body swayed in the current at a right angle from his rescuer. The sunken rocks, with their jags and hollows barely covered by the water, tore the tide into a dozen conflicting courses, and once caught in this turmoil, swimming was all but impossible; all Lowry could do was to keep himself and his burden afloat, for the under-tow dragged at his legs, and its suction was like a palpable clutch. A tooth of black rock, rising a foot from the water, gave him a minute's respite; seizing the slippery projection, he rested, while Tregenna gasped, 'Let me go, and save yourself!' and tried to tear the other's hand from his throat. But Lowry kept his grip, and away they were borne on the cross-currents in a zigzag course. Then Lowry could see the edge of the 'race,' the clearly defined limit of the turbulent water—a straight white line of froth; beyond that line was comparative safety. Inch by inch he fought the current; his strength was almost spent, his stroke grew feeble and spasmodic, when he was suddenly conscious of a slackening of the pressure that bore in upon him, a feeling

of relief as if a weight had been loosened from his limbs, and floating in tranquil green water, he relaxed his clutch of Tregenna's throat, and drawing a deep breath, he turned to the Porthillian man with a smile of triumph.

To gain the rigging was now a comparatively easy matter; and when they had climbed from the water, Tregenna, wringing his yellow beard said, 'You've succoured me this day, Gabriel Lowry,' To which Lowry replied, 'Nay, I've only got 'ee into a purty pickle, for yer us be nayther afloat nor ashore, but hangin' betwixt the say an' the firmyment.'

CHAPTER IV.



HE case of the two men was still desperate enough. It was a precarious perch, this yard of the sunken *Hirondelle*, for the mast trembled with their weight, as

though it might break away at any moment. The Gurnard Rock had disappeared, and there was nothing but water to the seaward. They could see the top of the lighthouse on Trevasse Point, two miles distant, the lantern showing over the brow of the headland. The immediate coast was precipitous, sheer walls of rock that offered no foothold at high-water; and the only place where a swimmer could land was Bubbly Cove, whose narrow entry a man might make or miss. Far up on the cliff there was one outlying cottage of the little parish of Pengooney, and cattle grazing, but no other sign of life or habitation.

All the sullenness had disappeared from Lowry; it was as though the perilous water had in some sacramental way washed the ill-humour out of the man, and there was a gleam of geniality in his dark face. As for Tregenna, he soon recovered his serenity, and was as joyial as a man may be whose stomach is half-filled with sea-water. He wrung his garments and hung them up to dry, and at times the two men waved them with much shouting towards the shore; but there was no sign of help.

A clasp-knife, a tobacco-pouch and pipe, and a box of matches were the contents of Tregenna's pockets. The match-box was of metal, and fitted as closely as a watch-case; they dried the damp matches in the sun, but the saturated tobacco defied ignition. Lowry, an abandoned smoker, cut an inch of pendent rope and charged the pipe with the tow, but found no solace in the experiment.

'Here us must bide till nightfall, I reckon,' said Tregenna, 'when your friends 'll surely come a-searchin' for 'ee.'

'Iss, maybe,' answered Lowry; 'or p'raps the Porthillian chaps 'll come for thee.'

'Nay,' said the other, smiling, 'my mates knaw nort o' this fightin' expedition; ye see, I'm reckoned a stiddy, harmless man, an' no fighter.'

Once, when they shifted their position on the yard and there was an unusual tremor of the mast, something bobbed up on the surface of the water and drifted away beneath them—something that the vibration had liberated from the entanglement of the submerged rigging. It looked at first glance like black seaweed, but was long dark hair, and with it there were gray garments floating.

Lowry turned pale beneath his sun-brown, and Tregenna said solemnly, 'Cap'n's wife, I reckon—poor sawl!'

So the long hours of the afternoon wore on, and the summer day died as it had lived, gloriously. The sun dipped into the Atlantic, and light clouds blew up from the sea and dappled the sky with crimson. The western cliffs were aflame, and the great headland of Trevasse, bright gold from base to summit, gleamed across the waters like a promontory of Eldorado.

Cold, cramped, famished, the two men clung to the mast, and valiantly kept up their courage. They shared the half-dried garments, and attempted to find some humour in the allotment.

Then the night came on, moonless, but marvellously clear and fine. The sky was alive with stars and the sea with phosphorus. The swirl of water around the mast gleamed like liquid fire, and every ripple was a touch of white radiance. Once again the Gurnard Island rose from the sea, and the eddies circled the emergent rocks with a luminous fringe.

'Tis a brave night!' cried Tregenna, but his teeth chattered; and he essayed a snatch of song:

'Did'ee ever hear tell o' St Ives,
Where the men be afeard o' their wives,
An' the wimmen'—

'Sing something seemlier,' interrupted Lowry, 'for the judgment's still awver us.' And Tregenna ventured on a Methodist hymn, in a voice husky with much vain shouting.

The revolving light on Trevasse Point sent a shaft of brilliancy across the water at quarter-minute intervals, and they watched it till the recurring gleam distressed them with its persistent regularity. Inland, they could see the lights in the windows of the cottage at Pengooney; and above Pengooney hung the pole-star.

Then a thought came to John Tregenna. He cut a length of rope from the rigging, and, unravelling the strands, improvised a torch. The tarry hemp burnt with a blaze, and as he waved the flaring brand above his head he cried to his companion, 'If there's a coastguard or anybody ashore looking sayward, they'll surely see this signal.'

Young Dick Mundy of Pengooney was fetching turfs for the hearth-fire, when from the eminence of the turf-rick he saw a strange light upon the sea, and called into the house, 'Father, father! there's curious lights upon the watter!'

'Whereabouts, my son?' asked old Isaac Mundy.
'My aged eyes be gettin' dimmer 'n iver.'

'Nigh the Gurnard, where the French brig foundered.'

'What soort o' lights be 'em? Stiddy lights like a boat's light?'

'No; dancin', flickerin' lights. They'm all of a quiver.'

'Poor sawls!' cried the old man in an awed voice; 'poor foreign sawls!'

'Why, father! what do 'ee think they be?'

'The Lord knaws! But they'm no lawful lights to be dancin' awver drownded folks!'

'I'm afeard 'tis some signal o' distress, father; us had better ask Uncle Peter.'

So they descended the hill, and sought Uncle Peter where he was always to be found—in the corner of the settle at the 'Blue Anchor,' with halfa-dozen convivial cronics.

'There's lights upon the watter, Uncle Peter—coorious lights that flicker here and flicker there; do 'ee think 'tis a sign o' distress, or something evil in the darkness?'

'Signals, surely!' cried Uncle Peter, a shrewdfaced, corpulent little man. 'We must have the boat out; and you must go, Isaac Mundy, for you'm the wan man that can get a boat out o' Bubbly Cove in the dark.'

But old Isaac drew back. 'If 'tis mortal man in mortal danger I'll go,' said he; 'but if 'tis some sperritual adventure'—

'Come, Isaac!' said Uncle Peter briskly, 'we never reckoned 'ee a coward.'

'Coward!' roared Isaac, seizing unreasonably on the word; ''tis purty late in the day to call me a coward, an' me fourteen year cox'n o' the Lantrissy lifeboat, an' niver missed but wan launch, when 'twas dru a poultice so's I couldn't sit fitty.'

'Come, come! we're wasting precious time,' said Uncle Peter, reaching for his stick. 'I'd go myself if 'twasn't that I'm eaten dru with rheumatics.'

So the group of men descended the narrow combe that leads to Bubbly Cove, Uncle Peter hobbling on two sticks, and one of the younger men carrying a stable-lantern. Half-way down they caught sight of a flickering light on the sea, that flared and circled for half-a-minute and was lost.

'Tis this side o' the Gurnard!' cried Uncle Peter; 'though what 'tis I can't for the life o' me make out.'

Old Isaac Mundy had quarrelled all the way down. 'Coward, be I? Aw, well! if a man lives long enough he'll surely hear news!'

'No, no, Isaac! you'm a proper hero, an' us all knaw it.' But Isaac had a grievance, and was not to be easily appeared.

'Iss, I'm a coward! Dick, my son, you'd better rin home to your mother, an' tell her to tear up the Portygese letter that's folded in the big Bible—thicky letter from the Portygese consul, wi' the coat-of-arms o' the King of Portygal hisself in the corner. 'Twas writ when the San Josy went scat on the Pinnacles, an' us brought off the crew o' twenty-dree. There's the word "dooty" in that letter, an'

"hundaunted," an' "hintrepidity," an' other lies consarnin' old Isaac Mundy, an' 'tis time thicky letter was a-teared up.' So, with the old fellow grumbling all the way, they reached the beach, and carried the boat (there is only one at Bubbly Cove) down to the water.

Old Isaac and Dick entered the boat, each taking an oar and rowing warily between the rocks, which Isaac knew as a man knows his fingers; and they were soon out of the narrow entry of the cove into the open Channel. Each stroke smote the phosphorescent water into fire, and the wake of the boat was a long streak of quivering radiance. The tide was with them, and they made rapid headway.

'Can 'ee see aught, Dick?' asked Isaac in a sort of whisper. To tell the truth, the superstitious old man had been rowing for some minutes with his eyes shut.

At this moment Dick, looking over his shoulder, saw a sight to appal a hero; he suddenly stopped rowing, arrested by the vision that frightened while it fascinated him.

The glare of a swaying torch fell with fantastic effect upon two half-naked figures, poised above the water as by magic, without boat or sign of floating thing beneath them, and in the fitful yellow gleam the forms looked grotesque—demoniac. Then the flame flickered down into the sea, and the apparitions vanished.

"Tis a strange, fearsome sight, father! gasped Dick. But Isaac did not look; with closed eyes and chattering teeth, he gripped his oar in terror.

Then out of the darkness came a shout: 'Boat aloy!'

'Ahoy!' echoed Dick as manfully as he could.

'Boat ahoy! Help! help! help!' There were now two voices calling.

'Where be 'ee?' cried Dick.

'Here, in the riggin' o' the French brig!'

'Lord ha' mercy upon us!' gasped the old man, 'they'm sperrits, Dick—French sperrits, six weeks departed!'

But Dick had more logic. 'They'm no foreigners, father, for they spake good Cornish English.' And to banish what remained of his fears, he sang at the top of his voice:

'Is there baalm in Gilead, brother, Baalm for me?'

And across the water, John Tregenna's husky tenor flung back the answer:

'There is baalm in Gilead, brother, Baalm for thee—ee!'

Taking the oar from his trembling parent, Dick rowed sturdily toward the voice, and in a few minutes the two combatants of the Gurnard Rock, numbed and exhausted, were lying in the boat, speeding shoreward.

WEIGHTED SILK.

By T. L. PHIPSON, Ph.D.



HE silk industry is at present in a rather critical condition, occasioned by excesses committed in the practice of 'weighting' the fabrics made of this material. The subject is worthy of particular attention on

the part of all connected with the silk-trade, the future of which appears to depend upon it. Naturalists have long been aware that when the silkworm spins its cocoon every thread is covered over by a kind of gummy matter which can be washed away by boiling water. This gummy covering is very similar (but not absolutely identical) in its chemical nature or composition to silk itself; but it is soluble in water, which silk is not. On the fibre as produced by the silkworm there is about 25 per cent, or a quarter of its weight, of this peculiar covering.

Now, before the material is submitted to dyeing, this soluble gummy matter, or 'sericine,' as it is sometimes called, should be all washed out; for it is well known that silk is never seen in its natural beauty and lustre until this substance has been completely removed by boiling with soap and water, or by means of steam.

A textile fabric, as every one knows, consists of two parts, the warp and the weft. The latter, being generally concealed between the warp threads, or so woven as to be seen only on the back of the fabric, need not have this gummy matter removed—that is, it need not be lustrous. This was the first step in the 'weighting' of silk: the gummy matter was left on the threads forming the weft of the fabric.

This practice appears to have arisen a long time ago in Europe, whilst in the East-in China, Japan, India, and Persia-the tissue was always bright on both sides, the gummy covering of the fibre having invariably been removed from the threads forming both the warp and weft. Gradually the French dyers began to increase the weight of their silk in other ways, in order to compete with the brocade-weavers of Italy. From the time of Louis XIV. to that of the First Empire in France, both the warp and the weft threads were usually boiled and cleansed of the 'sericine.' But in the time of Napoleon I. a notable decline set in, and in a comparatively short time it developed into a truly fraudulent practice. It was discovered that by plunging the raw silk, whether washed or not, into certain astringent decoctions containing tannin, the latter adhered to the fibre or combined with it. In this manner it was found easy to bring the silk that had lost its gum by washing up to its original weight, and to increase its bulk considerably at the same time.

Such practices were well known in England as early as the time of King Charles I., for about

1630 this unfortunate monarch issued a proclamation forbidding the 'deceptions in the dyeing of silk,' consisting in the addition to the dyeing mixture of injurious substances calculated to increase the weight of the material. A few years later, however, he withdrew this prohibition to some extent, 'having become better acquainted with the subject,' as his Majesty candidly observes.

At the present day the practice of weighting silks by means of astringent extracts, salts of tin, silicate and phosphate of soda, and a variety of other substances, all more or less injurious to the wear of the fibre, has reached such a height that it is seriously affecting the trade. This is especially the case as regards black silk; but fabrics of other colours suffer in the same manner.

It used to be remarked that a silk dress or a silk handkerchief would last a lifetime; and this is almost true for absolutely pure silk. But in much of the fabric sold at the present day there is not more than 10 or 12 per cent. of real silk, all the rest being extraneous matter applied to the fibre in the deceptive process of 'weighting.'

Pure silk when burnt leaves a quantity of ash which is always considerably less than 1 per cent.; but the ash left by some weighted silks has been found to amount to as much as 48 per cent, of the weight of the fabric.

The extraneous substances to which we have alluded are caused to adhere to the fibre by passing the skeins through hot baths of tannin extracts, tin salts, salts of iron, antimony, potash, &c.; and it has been found that when a silk much charged with such substances is heated it will not burn with flame, but will only smoulder away, leaving a very large amount of ash behind.

But these weighted silks are, however, of so combustible a nature that some have been known to take fire spontaneously, a result due to the gradual decomposition of the substances used for weighting, and disastrous fires have been traced to this cause. Spontaneous combustion is liable to break out more especially in black silks that are stored in warm, dry places.

Look at it how we will, the weighting of silks is a nefarious practice which should be forbidden by law. It causes a black silk dress to become more or less shabby in a single twelvemonth. Skeins of German-dyed silk have been often found to be thus increased to the extent of 400 per cent. of their original weight. Such silk has, of course, no lustre; but that is of no consequence, because when woven it will be covered by a warp that has lustre. This excessive weighting, besides increasing the combustibility, swells up the tissue and pads the fabric like stuffing a cushion, giving it 'a fictitious feel, appearance, and substance.'

This unfortunate state of things has arisen,

says a competent authority, 'from the insatiable pressure of the silk-merchant's buyer for cheapness, and the degenerate spirit of commercial competition among the manufacturers themselves,' Under such severe trade pressure artificial means are resorted to for cheapening the fibre as much as possible; and to such an extent is this now practised at each of three great silk centres on the Continent that the very existence of their staple industry is most seriously threatened.

We have hinted above that the prime cause for the 'weighting' was a desire to make up the original weight of the raw silk, a loss being occasioned by the boiling off of the natural gummy matter which amounts to about 25 per cent. By this treatment a pound of sixteen ounces is reduced by boiling to about twelve ounces. But as long ago as 1875 the weighting of silk was carried on by 'improved methods' to the extent of 100, 200, and even 300 per cent. Nowadays these numbers are left far behind, and recent chemical analyses of certain silk fabrics show that 900, and even 1000, per cent. has been reached, until, in fact, the material is no longer silk, but a mere conglomeration of mineral

matters and dyes, with perhaps some 10 or 12 per cent. only of real silk.

Black silks which have been weighted to the extent of 300 or 400 per cent. have been known to take fire of their own accord—that is, without the contact of a substance in ignition. Not many years ago a fire broke out in the warehouse of a large silk-mercer in Paris, and was traced to this cause. It was found to have originated inside a large parcel of black silk, which had been delivered only twenty-four hours previously from the dyers. In 1871 a fire traced to a similar cause occurred in a silk-dyeing establishment in the United States. It is now considered unsafe to pack such weighted silks in deep boxes.

As regards the general public, the weighting of silks should be done away with entirely. No silk fabric should be allowed to be offered for sale that does not contain at least 80 per cent. of pure silk. In fact, the time has arrived when this material, like so many others, should be 'sold on analysis,' and paid for according to its composition. That would soon have the effect of bringing about a much healthier state of things in the silk industry.

IN CARE OF THE CAPTAIN.

By John Arthur Barry, Author of Steve Brown's Bunyip; In the Great Deep, &c.



MONGST the saloon passengers of the *Illimuni*, ere she was a fortnight out, little Miss Agnew had become quite a pet. 'She was such a dear—so natural, so really chic!' said the ladies; whilst the men enjoyed

to the full her utter, or assumed, lack of conventionality. She was a fresh-coloured girl of about eighteen, handsome enough after a robust, dairy-maid fashion, with full red lips, white teeth, and black eyes, under a shock of curly hair, that shrank from no man's gaze.

Miss Agnew had come on board at the very last moment, with an uncle and an aunt to see her off; also a note from the owners commending her to the captain's care. Popularly it was known that she was a rich squatter's daughter returning home after a long visit to England. Her sole occupation of one of the best berths in the ship, as well as the possession of plenty of spare cash, gave some reason to the rumour of wealth. It was also whispered that she had been expelled from more than one fashionable school. But nobody seemed to think much the worse of her for that.

This trip the *Illimani* happened to have a rather aristocratic passenger-list for Australia. Besides poor young Badegge, who was nobody's enemy but his own, there were an incoming governor and his countess; another couple of stray peers and peeresses; a rich baronet and his wife; and several gentlemen, middle-aged and elderly, making the

round voyage for their health's sake—that is, the sake of a long and uninterrupted steady drinking. And with these, at times, nothing loth, 'Dolly,' as she was called tout court, would smoke a cigarette and toss off a glass of champagne; looked upon with a lenient eye by her female friends, not only on the plea of her being an 'Australian tomboy,' but for the sake of the little scandalous tit-bits she was able to retail to them afterwards in the privacy of their cabins.

At Naples, amongst others, there came on board for the second saloon a young Frenchman, apparently pretty ill with asthma; so much so, indeed, that he seemed able to do nothing else but lie in his deck-chair all day long covered up with rugs. Quite a curiosity, too, was this deck-chair, massive but light, folding up into a compact compass, curiously carved, and made of neither cane nor canvas, but of stout olive wood, with big bulging arms and a thick curved back. And Monsieur Deschamps seemed to set great store by it, for, always when the day was over and he walked feebly to his berth, the quartermaster carefully folded up the chair and carried it to its owner. At first people laughed. But 'cranks' and 'eccentrics' are so plentiful on such ships as the Illimani that far more outre things ceased to attract attention, and Deschamps and his chair soon became part and parcel of the daily and weekly monotony.

Curiously enough amongst all the passengers there was no one with a sufficient knowledge of French to interpret between the sick passenger and the Illimani's doctor, or the stewards, or anybody. And this was awkward; for Monsieur Deschamps was unable to speak a word of any language but his own. This matter presently coming to Dolly's ears, she volunteered to have a go.' 'I was,' she said, 'a couple of years at school at Rouen; and if I can't patter their lingo, I reckon I'm due for the leatheriest medal on board this canoe.' So, tripping across the bridge that separated the two classes, Dolly went up to the invalid and began-much to everybody's admiration-to discourse with eloquent volubility and gesture. Listening a minute, the Frenchman, appearing to recognise the real thing at last, sat up and waved his hands and shrugged his shoulders, and smiled with a delight and gratification beautiful to witness. And after this, nearly every day, Dolly went along and cheered the poor fellow up, interpreting his symptoms to the doctor and his wants to the stewards.

In most ocean liners there is posted up somewhere a notice advising passengers to deposit their valuables with the purser for safety during the voyage, a small percentage being charged for the accommodation. Many people object to pay this; others are too lazy to go to any trouble; others too careless. So that, very often, until something is missing, the caution is a dead letter. It was so on the Illimani. But one morning Dolly, returning from her usual visit to her French friend, found the saloon a scene of the utmost confusion-ladies running about with empty jewel-cases, stewards protesting, purser threatening, and the chief stewardess in hysterics. The Countess of Trebizond had lost a diamond necklace and a set of priceless pearls; Lady Trotter de Globe was minus her family jewels, sapphires, opals, and diamonds valued at £3000; the Honourable Mrs Monopole's diamond earrings (they were fashionable then), tiara, and necklet were gone. In fact, it appeared that nearly everything worth having was gone. There were a lot of paste and Palais Royal imitations—beautifully done-but all such had been rejected with the nice appreciation of an expert, or at least an intimate. And, to complicate matters, nothing was forcedevery lock intact and the keys in their owners' pockets. The excitement and commotion was intense. The captain alone kept calm; and when the male relatives of the victims talked about suing the company, he suavely drew their attention to the notice afore-mentioned. Dolly was demurely sad, and condoled, even wept, with her aristocratic friends. Her own things, a set of pearls and a few diamond ornaments, she explained, had been in the purser's big safe from the commencement of the voyage. Her uncle had insisted on it.

But who was the thief?

Public opinion pointed to some one amongst the stewards. And the first thing done was to ransack the 'glory-hole,' as their quarters were called. Nothing was found. Then 'search law' was proclaimed throughout the ship, much to the indignation of the second and third classes. It took some

considerable time to overhaul the effects of nearly four hundred people. Nor was it a pleasant matter, as the purser, the chief steward, and their assistants discovered. Not a trace of the lost jewellery was to be found. But the captain grew anxious. He had been quite certain that the things would be found. Although he was not liable, the ship's reputation would be ruined so far as carrying passengers was concerned. And this was a serious consideration. Still, what more could be do? Then suddenly be remembered that Watson was waiting at Colombo to go on with him to Melbourne. If anybody could help it was Watson! Wherefore those who troubled about the daily runs noticed that the Illimani was being driven at almost top-speed across the Arabian Sea. In these days she was a decidedly uncomfortable ship within - suspicion writ large on every face of all her great company, each one doubtful of his neighbour, and all secretly watching, and, so it seemed, thinking about the reward offered by the victims and the executive of the Illimani-£500-contributed to by captain and ship's boy alike, and very willingly. Dolly Agnew gave £10 to the fund; and her friend, Monsieur Deschamps, when made aware of what was going on, insisted on putting down his name for £5. But nothing came of it.

At Colombo—reached after a record run—there was indignation when it was found that the captain had stopped all shore-going, and also barred the usual crowd of dealers, jugglers, &c. from coming near the ship.

Only one passenger came on board at Colombo an old, gray-haired, gray-bearded man who walked with a stoop, and peered dimly at people through tinted spectacles. He was accepted as a tea-planter, an old friend of the captain's, going to Australia on business. Speaking little himself, Mr Johnson was, nevertheless, a perfect godsend to the ship at large; and into his ears was dinned by the passengers again and again the story of their losses and wrongs.

'Well,' asked the skipper a few days later as Mr Johnson strolled into the former's state-room, 'any news yet?'

'Not much,' was the reply; 'only that you've got at least one artist on board—one of the most skilful cracksmen in London—which is saying a good deal.'

'Which is he?' asked the captain. 'Some fellow in the steerage, I suppose.'

'Not much,' replied the other, laughing. 'The only wonder is that he is not in the saloon here. It's the fellow in the second who gammons sick, and sits in the big chair all day.'

'Ha, ha!' laughed the captain; 'you're out of it this time, old man. That poor chap's a Frenchman—can't speak a word of anything else!'

'Is that so?' replied the other calmly. 'Well, in any case, he's the man who can tell you where the stolen stuff is.'

'Nonsense,' said the captain. 'He's never been for ard the whole passage. Why, if it hadn't been

for Miss Agnew talking to him he'd have had to stay dumb altogether!'

'Fine-looking, fresh-complexioned, rather Jewessy, curly-haired girl—lots of side and sauce—No. 27, port side ?'

'Right,' replied the skipper. 'Australian native. She 's in my charge. Knows her way about, though, too well to want any looking after.'

'H'm!' grunted his companion, lighting a fresh cigar. 'You told me, I think, that you had searched the ship?'

Every corner and every soul on board,' replied

the captain proudly.

'Tchk, tchk!' said the other between tongue and teeth. 'What a pity! Tony Jenkins is a genius, though! A commoner would have chucked the things overboard. Not Tony; he's too much of an artist to stand any waste of that sort. Yes, I should say there was a chance. When you first broached the matter I thought it was only a bit of amateur aristocratic kleptomania. I see now that it's thorough business—business sweet and hot; a well-considered, long thought-out, cleverly put up job. Thank your stars, my boy, that I happened to be where I was, or you'd have lost your billet to a certainty!'

'Well, Watson—yes, of course, Johnson,' said the captain, changing colour as he thought of the fix he was in and saw no way out of, 'there's the

reward, you know. And'---

'Don't want a penny,' replied the detective.
'This is purely a little private affair between ourselves. I'm on official business, and shouldn't have meddled but for old acquaintance' sake. You did me a good turn once. I'll return it now—if I can.'

Next morning Mr Johnson managed, casually, to have a talk with Dolly, who came up to where he sat in the sun, looking very old and feeble, to ask his opinion on the quality of the saloon tea, which, she averred, 'wasn't fit for pigs to drink.' Later, she confided to her friends that he wasn't a bad old josser, and that she rather thought he'd been a gay sort of a chappie in his day; whilst, on his part, Mr Johnson, removing the powerful magnifying-glasses he had worn throughout the interview, smiled in his beard and muttered, 'The scar's there all right, but fainter than when I saw it last. Clever! Clever's no name for it! No use looking through their berths, I suppose. However, I may as well have a try. I'll bet the stuff's neither there nor on their persons! If not, where then l A sum in induction à la Sherlock Holmes!' And 'Mr Johnson,' generally supposed to be the cleverest and keenest of all Scotland Yard, puckered his brows over the problem. During dinner he managed to slip into, and with practised hands ransack, Dolly's berth. But he found nothing at all incriminating in the single cabin trunk, unless a bottle of hair depilatory and another of dye could be deemed so. The clothing was all of good make and quality, and as the intruder noted the carefully worked initials 'D. A.' on

everything, he shook his head doubtfully. Under the circumstances a mistake was a very serious And the Illimani was rapidly nearing the Australian coast. If he was to make a coup he had no time to lose. Monsieur Deschamps occupied a deck-chair aft; and whilst its occupant was at lunch in the second saloon on the following day, Mr Johnson made as free with his belongings as he had done with Dolly's. And with a little more success. In the pockets of a pair of old trousers he found a tiny key with only one ward, at sight of which his eyes glistened. 'M-m,' he muttered as he stepped out on to the empty deck; 'the rest of the bunch are overboard, I suppose. Overlooked this one, evidently. Didn't think Tony was so careless. But what's he done with the stuff? Sent it after the keys? No, I can't believe that, after going to so much trouble.2

One morning, listlessly observing the little procession emerging from the invalid Frenchman's cabin as usual—first, Monsieur Deschamps, walking very slowly and holding on tight to things in his path; then the quartermaster, laden with chair and rugs, mounting up to the second promenade deck—an idea flashed across the watching detective's brain, and ere night he managed to have a chat with the quartermaster.

'Yessir,' said the latter, in answer to a question.
'Poor chap, 'e thinks a lot o' that cheer. I've got to put it in 'is berth every night so keerful as if it were med o' glass. You see, it ain't no common

cheer, that one.'

'Well, I'm ready,' said Johnson to the captain shortly after this. 'You've been very good, and haven't bothered me much. Now I want your help. You must get the doctor to send for the Frenchman to the dispensary on some pretence or other. Then Miss Agnew must be called to interpret. Presently we two will drop in; and then, well, if I'm right, you'll see some fund If I'm not, there'll be wigs on the green. But I can't put it off any longer, although not as sure as I'd like to be. Once we get to Albany, the fat's in the fire; for I cannot wait to shadow people; nor can you very well prevent the Westralian passengers from landing.'

As the captain and Mr Johnson strolled into the dispensary that evening Monsieur Deschamps was speaking. 'Mais oui, Monsieur le docteur,' said he, 'je crois bien que, depuis que j'ai pris votre der-

nière mixture, je me fais plus de santé?

'He says,' translated Dolly, 'that since he took that last medicine he feels much better.'

'Hello, Tony, old man!' suddenly exclaimed the detective, who had been standing in one corner of the rather dim room. 'I'm sorry to hear of your—your being so ill. How do you like the sea?'

'Jim Watson!' shouted the sham Frenchman, as he stared from the clean-shaved, hawk-eyed, massive-jawed man before him to the gray wig, beard, and spectacles on the deck.

'And how's my little friend the Kid?' continued Watson, stepping to the door, and noting, with a breath of relief, the colour fade out of Dolly's cheeks, and the familiar, hunted look he knew so well steal over both their faces. 'No, you don't!' he continued, suddenly whipping out a revolver and presenting it at Tony, whose hand was quietly stealing round to his hip-pocket. The other laughed carelessly, and taking a eigar out of his case, lit it; whilst Watson, turning to the astonished skipper and doctor, said: 'Allow me, gentlemen, to present to you Mr Anthony Green, alias Jenkins, alias Deschamps, and a dozen others; and Master William Dawson, better known as The Kid, The Dinah, Young Dutch, &c .- the former gentleman the leading artist of his profession; the latter the best female impersonator of the day. Now, Tony, where's the swag?'

'Curse you, Watson!' replied the elder of the pair calmly, but with an ugly look in his shifty gray eyes. 'Find it, if you can! I won't help you!'

'Same here!' exclaimed the ci-devant Dolly, with a laugh. 'And if any of those old cats in the saloon make a row, Tony, I'll tell some funny little stories I've picked up amongst'em that will make'em glad to leave Australia by the next boat.'

'Good boy,' said Tony approvingly. 'Kept eyes

and ears open, ch?'

'You bet!' replied the lad, defiantly sitting back, crossing his legs, and puffing away at a cigarette; regarded by the poor captain with a fascinated stare of amazement.

'Well, Jeukins, come now—the swag!' exclaimed Watson impatiently.

'Find it,' replied the other laconically.

'All right,' said Watson, playing his doubtful trump. 'Captain, will you kindly have Monsieur

Deschamps' chair brought in here.'

'The devil!' shouted Jenkins. 'Never mind troubling. How did you find it out? All right; I pass. Watson, you've spoiled one of the best things of the century! Well, I suppose we can go now. I don't fancy anybody will bother either of us, from what the Kid's told me off and on.' And he chuckled. 'I suppose,' he went on, 'that we may as well keep up the fiction till we get to Albany, ch, Watson? But think of all my time and trouble and ingenuity wasted. Think of that lovely chair and its secret hiding-places. Hang it! I could almost cry over the thing, Watson.'

'Or shoot me,' replied the latter, laughing grimly

as he replaced his disguise.

'Well, yes, at the moment,' admitted the other. 'But it's all over now. I never bother about spilt milk. You know that, Watson. All the sparklers shall be back before eight bells to-night, parole d'honneur. Doctor, I feel so much better that I don't think I'll require any more medicine. Miss Agnew, I know I can trust you to smooth matters over with our aristocratic friends là bas. Have you finished with us, Watson?'

'Provisionally,' replied the detective. 'I don't suppose the captain here wants more fuss made over the matter than can be helped. And the doctor will keep silent for the ship's sake. I'm of Miss Agnew's opinion, that the ladies for'ard will be only too pleased to get their jewellery again. Of course, if we had long to wait it would be different. But we shall be at Albany to-morrow; and that young scamp's presence amongst them won't matter much for one night more.'

'Look here, Watson,' put in 'the Kid,' 'if you're not civil I'll tell tales before I go yet.'

'But,' stammered the captain, speaking for the first time, 'I say, Watson, where's our guarantee? Of course you may trust Mr—um—Jenkins—er—Green, there, and—this er—young man, or girl, or whatever it is, and take their words. But I'd like something'—

'That's all right,' interrupted Watson cheerfully.
'I know my mark. I'd trust Tony up to any sum, once he's given his word. Believe me, it will be all serene. And neither of them will blab. They've been fairly beaten for once at least.'

'Thank you, Mr Watson, for your good opinion of me,' said Tony, pausing at the door and bowing politely. 'You will see, I hope, that it is deserved. Au revoir!'

And, sure enough, some time and somehow, before next morning, each of the despoiled ones found her property returned intact. Explanations, of course, were demanded; but all at once the thirst for them dropped; and 'Dolly' laughed mockingly at the glances of fear and abhorrence darted at her by whilom friends and confidentes. On all sides it was agreed 'that for the sake of the ship and the captain' the affair should be hushed up. It was difficult; but Watson, with the aid of a stowaway, who was working his passage as deputy-assistant fourteenth steward, and for a consideration acted as scapegrace, managed it.

'Keep the chair, Watson,' said Monsieur Deschamps as he went over the side at Albany. 'It will remind you of the prettiest bit of work you

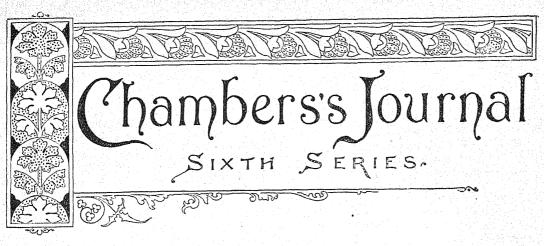
ever did.

PICTURES IN THE FIRE.

WE watch together; but in shade and shine You see the golden future of your ways, And I the light that shone on vanished days;—No; though together eyes and hearts combine I cannot see your pictures, nor you mine. Yet as the fire burns low, and sinks the blaze, From the cold hearth I turn,—a moment gaze,—And read our union in those looks of thine.

When on the hearth of Life the fire burns low Wherein our lonely dreams and visions shone,—
When the last picture sinks with all the rest,—
Dear, may we turn as trustfully as now,
May we as gladly quit the cold hearthstone,
And know that Love's Reality is best.

E. Blair Oliphant.



AT THE MAKING OF CANADA.

By ISABELLA FYVIE MAYO.



is interesting to remember that one of the most flourishing districts of Canada—the tract lying between Lakes Ontario and Huron—was first settled (about seventy years ago) mainly by a little group of Scotch-

men of the 'literary period' of Edinburgh. John Galt, the famous Scottish novelist, was also the founder and acting right-hand of the 'Canada Company.' The scheme had many of the defects of all such schemes.

But the Canada Company was an immense improvement on what had gone before.

Bell, the historian of Canada, tells us that British governmental favouritism had appropriated to itself 'whatever of Canada had been hitherto explored.' He says: 'Between the years 1793 and 1811 more than three million acres of this territory had been shared among a couple of hundreds of lucky grantees. . . . None of the monopolists of all this soil had the slightest intention of turning it to account by proper cultivation. As it cost them nothing, or something the nearest to nothing, the acquirers concluded to let it lie as it had lain for countless ages, till minor acquisitionists should clear their small soils (or spoils), open up roads, &c., and then the huge expanses of corruptly-appropriated wilderness would of course become "worth money" to parties hitherto unseen, who would then boldly come forward and peremptorily claim "their own."

The powers of the Canada Company were not all of this mere capitalist order. The Edinburgh literary men come out well in the matter. First and foremost, John Galt himself lived some time in Canada and put his whole heart into his work, whatever may have been his errors or mistakes. Partly, as it seems, on the very score of his literary gifts, he was somewhat mistrusted and hampered by certain of his company's directors. It seems hard for the average man, with no single 'talent' of his own, to conceive that some favoured individuals may actually have more talents than one!

The log-hut which Galt erected for himself in No. 4.—Vol. I. fAll Binh

Guelph, Ontario, in 1827, still stands, the building being now, we believe, in some way utilised by the Pacific Railway. In his pioneering days Galt is described as a fresh-coloured, splendid-looking man, almost six feet four, with a frame in proportion. Not a talkative man; but, when questioned, clear and courteous in his replies. There is probably a graphic portrait of him in his own little boy's remark: 'Papa is the biggest boy I ever knew.' A lifelong friend wrote to him: 'Were we words instead of men, you would be a verb active, with a strong, optative mood.'

Another literary Scotchman, whose strenuous influence on the Canada Company was exerted till his day of death, was 'Tiger' Dunlop, a medical man who had earned this sobriquet by his prowess in freeing an island of the Ganges from tigers. As John Galt, so William Dunlop, was a West of Scotland man and an Edinburgh littérateur. They were both 'sons of Anak'—Galt with 'a stoop in the shoulders,' Dunlop with a shoulder-measurement of two feet eight. Dr Dunlop, with his brother the captain, settled in Canada, and both of them lived and died there,

John Galt calls Dunlop 'a large, fat, facetious fellow of infinite jest and eccentricity.' They 'dived into the woods together.' Dunlop wrote to his sister in 1827: 'We have had a most laborious journey seventy-two miles through the woods, but have been rewarded by coming into the most beautiful country in Canada.' This was the district between Lakes Ontario and Huron. It was filled with wolves then; they did not begin to disappear till the steam-mills were started. As late as 1859 a young wolf was killed within fifty yards of a farm door. In 1890 we spent a pleasant afternoon with a fine old dame who had lived through those early days and knew what it was to shut herself and her little ones into the shanty and sit listening to the howling of wolves between the little family group and the returning husband and father. Another mother stood listening to a fierce wolf-fight, knowing that her children were on their way from school. She blew the big [All Rights Reserved.] DEC. 25, 1897.

horn to scare the beasts, and the children got home safely. It was found that the wolves had been struggling over a dead deer. It is said that the children went to school next day.

About Stratford and Guelph, now beautiful and prosperous towns in smiling agricultural districts, the woods were then so dense that in summer the sun was hardly visible, and the persistent gloom surrounding the little clearings was terrible to bear, and was sometimes not borne without pitiful results. The house whose clearing was large enough to afford sight of the widest space of blue sky was, we are told, the most popular house to visit.

Early settlers expect hard times, and the Canadian settlers got them. It was a time of much emigration from disaffected Ireland and from the Highlands of Scotland, over which deer-forests and sheep-farms were beginning to sweep. There was also quite another type among the settlers-retired officers and those on whom the great pressure in the middle-classes was beginning to tell, and families with small capital which they hoped might lay the foundation of fortune in a new country. Perhaps it was safest to go out poor. A wealthy old settler who went out as a boy in service, and saw his master and his master's friends disappear, their means wasted and their lives futile, has pertinently said: 'Sure they all had money, but few of them had any sense, and none of them knew how to work.' That knowledge was by far the best of

Some of those who had been most homesick in Canada lived to be homesick for Canada. As years passed by many of them fulfilled what they had felt to be the desire of their hearts and returned to their native land. One old Scotchman who went back to Scotland declared he could see nothing there but smoke! No efforts of kind relatives could give revisited scenes the charm which they had had in memory. He soon decided 'that he would rather starve in Canada than live in Scotland in affluence,' An old Scotchwoman also sought her early home. Her report was: 'She didna juist like it. Auld friends were dead. The homeland had now become the land of exile. Her health visibly and rapidly failed. She went back to Canada and survived, happy and stirring, for years afterwards.

'The whisky-bottle, the society of those they regarded as inferiors, but who were destined to become their superiors, disappointment, loneliness, and despair, turned many into poverty-stricken drunkards. Whisky and wet feet destroyed more promising young men than ague and fever.' Such is the summing up of one who has listened to many

old settlers' tales.

In view of such awful possibilities, one wonders how anybody could make himself responsible for saying 'Come,' save in the strictly veracious, wellweighed words of one correspondent of this period, who wrote: 'Do not leave your country unless obliged. If you be so, come to Canada. Persevere. and you will attain a comfortable mediocrity.'

We know the history of one German family who settled in this district in those days. Scarcely had they reached their destination when the father and children developed smallpox, which they had contracted on their outward journey. They lay in an outhouse. The sole ministration devolved on the poor wife-food being supplied by other settlers. After the illness had passed away (without fatal results), a log-hut was built, but it was, during the absence of the master, accidentally burned to the ground—the fire consuming their big chest, brought from 'the Fatherland,' containing sets of carefullyprepared clothing provided against many coming years. Yet in the end they prospered. It was one of this family, or one of their first neighbours, who immediately on his arrival planted a privet-hedge around his hut, and lived to see it such as would do credit to a British manor-house—a most dignified feature in the well-planned garden which now surrounds the pretty homestead with which his descendants have replaced the shanty.

Middle-aged Canadians of to-day, who were the little ones of the pioneer families, are often heard to say, 'Father lost heart, but mother kept us together.' It is said that the refined and educated women seemed the best able to accept the roughness and loneliness of their new homes. Possibly, neighbourly gossip meant less to them, and they may have had more resources in the way of homemade house-descration and floriculture. Or they may have better known a silence. They rocked their children 'in a long, bath-shaped affair, the head of it being a flat seat where the mother sat, so placed that the child rocked with her, and as she rocked she sewed.' Where the villages were springing up they made neighbourly festivals of washing-days or baking-days. They did miss their tea when that commodity failed them. But withal they called themselves happy 'if they could but have kept the babies'-a plaintive cry constantly heard, especially after 1832-'the cholera year.'

There must have been many sad histories among those brave, patient women. Few could be sadder than that of Mrs Kippen, by birth a Highland Grant. She was a widow, and she started out to Canada with her four boys. She soon found that the conditions of the country would not fulfil her hopes for the lads. On her appealing to influential friends at home, other openings were found for the boys-in Africa, Afghanistan, and India. Even the youngest, who remained in Canada, died far away from her. She lived on alone in that strange land, earning her own living as housekeeper to Galt's son. It is said that she never murmured. But once she was found with streaming eyes, an open book lying before her. It was Mrs Hemans's poems, open at 'The Graves of a Household?'

Owing to the class of immigrants who came—and to their ignorance of the conditions to which they came — strange things were sometimes found in wilderness dwellings. Old blue china, beautiful damask, and family silver were to be seen upon the table of a home by whose fireside lay a sick calf, and not far off an ash barrel full of half-made soap! A setting hen would find safe refuge under a piano, upon which two other hens would roost for the night. In the fields, clad in short bedgown and petticoat, the mistress had spent her morning wielding the pitchfork, but after dinner she would take her harp and accompany her daughter on the piano and two German neighbours on their violins! This girl-daughter, armed with an axe, had slain a wolf which attacked the house-dog. 'She played the piano beautifully.'

One who knows Canada well says that it owes much to the cultivated people who were among its early settlers: even to those who, being unable to adapt themselves in their new circumstances as did those we have just described, must be regarded as failures. For in a country where schools were sparse, where there were few books and unceasing manual labour for young and old alike, it was no small good fortune to have inhabitants with refined manners and wider horizons of experience and memory. Such kept up a stock of traditions, which were restored to living form as soon as circumstances would permit.

The two Dunlops—the doctor and his brother the captain—appear to have had all the common faults of the period—were heavy drinkers, and indulged in rude and even cruel practical jokes. Yet their coarseness of nature was evidently pervaded by finer fibres. Nay, possibly these were wholly fine natures fallen on rough days and ways. Nothing looks more melancholy than a rose drabbled in a gutter. Yet it remains a rose.

We can discern something of Dr Dunlop by the epithets bestowed on him. With those who heard him lecture he was 'this very able and gifted man.' We have noticed how Galt himself once described him. Elsewhere Galt remarked that he had heard him called 'a compound of a gentleman and a bear;' adding, 'I did not know that bears were so goodnatured.' He seems to have had a soft and kindly heart towards any form of suffering which came within his ken and which his nature could appreciate. There was, doubtless, much want of imagination at bottom of the thoughtless mendacity by which he lured others into sufferings incomprehensible to himself, who could sleep anywhere, and who could eat anything, even raw pork. To his friends he was staunch and faithful. He had the true pioneer's fellowship with animals: owning a fawn which would follow him about the house and leap at his bidding, and also a trained gander; he would not part from the kittens on his hearthrug; and an inn could be recommended to him as 'a cosy place where there was plenty of dogs and tomcats.' He had a clear perception of the sort of people who should go to a new country-and choked off some misplaced philanthropy by writing plainly, 'I have no occasion for a fine young thief of twenty-two or thereabouts, and if I needed such an accommodation I have no need to import it.'

Both the doctor and the captain seem to have been humorists of the first water. They put up a doorplate on their wilderness homestead of Gairbraid, round which they vainly desired a village to grow. They had a manservant, in white jacket and with table-napkin in hand. And it was by way of the kitchen door that romance entered the Canadian part of their lives.

The doctor had had his own love-story, ending in some misunderstanding which, it is believed, started him off to Canada. Then a certain Highland dairymaid—one Louisa MacColl—was sent out from his Scotch relatives to serve him and his brother in their exile. She proved so invaluable, and they were so afraid of losing her, that, according to the doctor, he gravely proposed that one of them must marry her, and that the toss of a coin must decide to whose lot she should fall. The doctor had the manipulation of the coin, and it decreed that the captain should be the bridegroom. The lady's version was different—but scarcely contradictory; indeed almost a confirmation. She said she had received an offer of marriage from somebody else, and that the captain, coming up behind her as she was milking 'Blossom,' whispered to her, 'Lou, if you leave us we may as well shut up shop, and proposed to her there and then. She proved a good wife, and a good friend to the pair, whom to the end she always called 'her deare gentlemen.' She liked her new dignities and indulged in costly apparel, but persisted in every form of domestic and dairy labour. She could not read, but she was in the habit of keeping a book open before her on Sabbath afternoons. She tried, perhaps out of mere thrift, to restrain the convivial habits of 'her deare gentlemen,' and took care of their snuff-bedabbled linen. She was of a persistently active, 'doing' nature; when she went for a walk with the captain he would botanise, but she would tuck up her smart skirts and set fire to stumps. After she came into authority she kept the purse and paid for everything. A neighbour said 'she was pretty near all her life at war with somebody,' and it was chiefly in the interests of 'the deare gentlemen.' She was as true to them in death as in life, taking any amount of trouble and cost that the two brothers might sleep, as they had wished, in one grave. She survived them many years, for she lived far beyond threescore and ten, while they both died in their early fifties—their magnificent constitutions probably broken up by their potations.

These drinking habits made the majority of the first settlers but dangerous friends to the native Indians, with whom, apart from this, their relations seem to have been neighbourly and honourable; though the Indians humorously remarked that 'White man was less willing to give Indian share of his beef than the Indian was to give the white man a share of his venison or other game.' Nobody was more esteemed among the early settlers than John Brandt, son of the famous chief of that name, and himself a member of the legis-

lature. He was an educated man, conversant with British literature. When he visited England he enforced on the poet Campbell a public retractation of the error in those lines of his 'Gertrude of Wyoming:'

Scorning to wield the hatchet for his bribe, 'Gainst Brandt himself I went to battle forth: Accursed Brandt! he left of all my tribe Nor man nor child nor thing of living birth—

the young 'warrior' conclusively proving that his father had had nothing whatever to do with the circumstance referred to.

This demoralisation of the Indians was not carried on in any cynical spirit desirous of their destruction, and ready openly to declare that 'the right way to approach a savage is with brandy and guns.' It was but the inevitable result of the white men's own habits and of his ruinous conception of neighbourliness-the Highlanders being especially accused of giving freely to the Indians 'that which they appreciated highly themselves.' We are told that on a certain occasion one old warrior was seen to kneel down in his canoe, praying to the great, Manitou for an abundance of meat and game, and making offering of that which, being manifestly most precious to the white man, seemed to him most likely to be acceptable to the white man's God-that is, rum and tobacco!

Out of these scenes of general drunkenness, bickerings would occasionally rise, but rarely or never seem to have culminated in bloodshed. The Indians were ready with succour when provisions ran short. The young Galts romped with young Indians, Other adventurous lads went off with them in their canoes, were royally entertained and safely restored to their homes. A little daughter of one of the most valuable settlers, a man who stood

steadily for temperance, was intrusted to two 'braves' who escorted her from town to her father's homestead. The little lady said they were very careful of her, and when she wanted a drink they made her wait till she came to a spring. Their permanent camp was not far from her home, and it was the young folks' greatest treat to go to see their dances and inspect their stores of maple-sugar, baskets, and mocassins. The squaws wrought the bead and bark knicknacks which have since grown familiar in this country as 'keepsakes from Niagara.' It may interest some to hear how they did their work. They traced their patterns upon bark with their teeth, first folding it many times with fancy angles: the corners, once bitten, when opened formed a regular design. Like the ancient Highlanders, they did not go far for their dyes: hemlock supplied red; root of the white ash, yellow; indigo, blue, or mixed with yellow for green. They could work in the dark as well as in daylight, a fact readily credible to those who have seen the fairy-like meshes which are wrought in gloomy Shetland hovels.

Anybody now taking his stand on some gentle rise in this favoured corner of Canada Felix, 'where no man need be hungry, where no child remains untaught,' and surveying the tall spires and many cupolas, the orchard-embowered homesteads, the clustered roofs, the bosky bits of town and country, may well wonder if these fruitful lands can indeed be the tangle of rotting log, swale, and noonday nights through which the first dwellers broke their way.

Dunlop once asked what it was which so increased the value of the land, and right wisely he answered his own question:

'Nothing but the work and the worth of the men who tilled it.'

JOHN BURNET OF BARNS.

CHAPTER V .- COUSINLY AFFECTION.



T was near midday before I started, so that night I got no farther than the town of Hamilton, but lay at the inn there. The next morning I left betimes, thinking to reach Barns in the afternoon. As I rode

along the greensward by the side of the Clyde the larks were singing in the sky and the trout were plashing in the waters, and all the world was gay. The apple-orchards sent their blossom across the road, and my hat brushed it down in showers on my horse and myself, so that soon we rode in a mail of pink and white. I plucked a little branch and set it in my hat, and sang all the songs I knew as I cantered along. I cried good-day to every man, and flung money to the little children who shouted as I passed, so that I

believe if there had been many more boys on the road I would have reached Tweeddale a beggar. At Crossford, where the Nethan meets the Clyde, I met a man who had been to the salmon-fishing and had caught a big salmon-trout; and, as I looked, my old love for the sport awoke within me, and I longed to feel a rod in my hand. It was good to be alive, to taste the fresh air, to feel the sun and wind, and I cried, 'A plague on all close lecture-rooms and musty books.'

At Lanark I had a rare dinner at the hostel there. The gray old inn had excellent fare, as I knew of old, so I rode up to the door and demanded its best. It was blessed to see a man obey your words after for many months being a servant of others. I had a dish of well-fed trout and a piece of prime mutton, and as good claret,

I think, as I have ever tasted. Then I rode over Lanark Moor to Hyndford, and through the moor of Carmichael, and under the great shadow of Tinto Hill. Here the smell of burning heather came to my nostrils, and so dear and home-like it seemed that I could have wept for very pleasure. The whaups and snipe were making a fine to-do on the bent, and the blackfaced sheep grazed in peace. At the top of the knowe above Symington I halted, for there before my eyes were the blue hills of Tweeddale. There was Trehenna and the hills above Broughton, and Drummelzier Law and Glenstivon Dod, and, nearer, the great Caerdon; and beyond all a long, blue back, which I knew could be none other than the hill of Scrape which shadowed Dawyck and my lady.

I came to Barns at three o'clock in the afternoon, somewhat stiff from my ride, but elated with my home-coming. It was with strange feelings that I rode up the long avenue of beeches, every one of which I could have told blindfold. The cattle looked over the palings at me as if glad to see me return. Maisie cocked up her ears at the hares in the grass, and sniffed the hill air as if she had been in a prison for many days. And when I came to the bend of the road and saw the old weatherbeaten tower my heart gave a great leap within me, for we Tweeddale men dearly love our own countryside, doubtless by reason of its exceeding beauty.

As I rode up, Tam Todd came out from the back, and seeing me, let fall the water which he

was carrying and ran to my side.

'Eh, Maister John,' said he, 'I'm blithe to see ye back sae braw and genty-like. My airm's fair like timmer wi' stiffness for want o' the backsword play, and the troots in Tweed are turned as thick as peas for want o' you to haul them oot; and twae mornin's last week there were deer keekin' in at the front door as tame as kittlins. There's muckle need o' ye at hame.'

He would have gone on in this strain for an hour had I not cut him short by asking for my

father

'Middlin', just middlin'. He misses ye sair. He'll scarce gang out-doors noo; but he'll be a' richt gin he sees ye again. Oh, and I've something mair to tell ye. That wanchancy cousin o' yours, Maister Gilbert, cam' yestreen, and he'll be bidin' till the deil kens whan. I'se warrant he's at meat wi' the auld maister the noo, for he cam'

in frae the hills geyan hungry,'

Now at this intelligence I was not over-pleased. My cousin was a great man and a gentleman, but never at any time over friendly to me; and I knew that to my father he was like salt in the mouth. I blamed the ill-luck which had sent him to Barns on the very day of my home-coming. I needs must be on my dignity in his company, for he was quick to find matter for laughter; and it was hard that he should come at the time when I longed so eagerly for the free ways of the

house. However, there was no help for it, I reflected, and went in.

In the passage I met Jean Morran, my old nurse, who had heard the sound of voices and come out to see who the new-comer might be.

'Maister John, Maister John, and is't yoursel'? It's a glad day for the house o' Barns when you come back;' and when I gave her the shawl-pin I had brought her from Glasgow she had scarce any words to thank me with. So, knowing that my father would be in the dining-hall with his guest, I opened the door and walked in unbidden.

My father sat at the head of the long, oak table, which had been scoured to a light brown and shone like polished stone. Claret, his favourite drink, was in a tankard by his elbow, and many wines decked the board. Lower down sat my cousin, gallantly dressed in the fashion of the times, with a coat of fine Spanish leather, and small-clothes of some rich, dark stuff. His plumed hat and riding-cloak of purple velvet lay on the settle at his side. His hair fell over his collar and shoulders, and well set off his strong, brown face. He sat, after the fashion of a soldier, on the side of his chair, half-turned away from the table, and every now and then he would cast a piece of meat to Pierce, my old hound, who lay stretched by the fireplace.

My father turned round as I entered, and when he saw me his face glowed with pleasure. Had we been alone we should have met otherwise; but it is not meet to show one's feelings before a stranger, even though that stranger be one of our own family. He contented himself with looking eagerly upon me and bidding me welcome in a shaking voice. I marked with grief that his eye did not seem so keen and brave as before, and that he was scarce able to rise from his chair. My cousin half-arose and made me a grand bow

in his courtly fashion.

'Welcome, my dear cousin,' said he. 'I am glad to see that your studies have had little effect on your face.' (I was flushed with hard riding.) 'You look as if you had just come from a campaign. But fall to. Here are prime fish, which I can commend; and venison, also good, though I have had better. Here, too, is wine, and I drink to your success, my learned cousin;' and he filled his glass and drank it at a gulp. He spoke in a half-bantering tone, though his words were kindly. I answered him briskly.

'I had little thought to find you here, Gilbert, but I am right glad to see you. You are prospering mightily, I hear, and will soon be forgetting your poor cousin of Barns;' and after a few more words I set myself to give my father a history of my doings at Glasgow College. Again, had we been alone, I should have told him my causes for leaving and my wishes for my after-life; but since my cousin was present, who had ever a sharp tongue, I judged it better to say nothing.

(To be continued.)

WATER: THE MODERN RIVAL OF COAL

By J. B. C. KERSHAW.



THERTO man, when he has wished to produce energy in large quantities for the various requirements of his industries, has known but one source from which to obtain it—namely, coal. Coal, as every one knows,

represents the locked-up energy of the sunshine of former days. Man had been upon this earth many thousands of years before he discovered the value of this black, hard substance as a source of heat; and it was only within the present century that he learned how to most effectually tap these latent stores of force, and how to obtain not only heat, but mechanical or electrical energy, at will from the coal-beds of the earth.

The industrial developments of the present century are largely if not chiefly due to the improvements of the steam-engine and to the power thus put into man's hand of developing large amounts of mechanical energy from coal.

So important has this use of coal become that the question of what is to happen to our industries when our coal-beds are exhausted has for long been a subject of serious speculative thought. It may therefore be of interest to our readers to learn that man has during the last ten years learned how to tap and utilise at will an almost limitless store of energy, a store that, unlike the locked-up sunshine of coal, can never be exhausted so long as rain falls upon the hills or snow upon the mountains of the earth. Man has in fact advanced one step farther in his command of the forces of the earth. He has learned how to harness the rivers and streams to the car of industry, and how to extract from water the service that he has hitherto obtained from coal. It is in this aspect, as a source of power, that water will be the future substitute for coal, and that it has already, in certain industries, become its rival.

The power of falling water has of course been known to man for many centuries; and since waterwheels are some of the oldest of mechanical contrivances for producing power it may be urged that this new step forward is in reality a step backwards along the path trodden by our forefathers. But the progress made by the men of an earlier day along this path was soon barred by their inability to construct water-wheels suited to any but the most moderate powers; and during the second and third quarters of the present century there was no advance made in this method of generating force for use in the industries of our country. As these extended and passed from the local stage of their existence to that of supplying not only the whole country, but all the countries of the world, with their products, the amount of mechanical energy required to drive the machinery of even a single mill or workshop rose from 50 up to 500 or 1000 horse-power; and the steam-engine was found to be far more convenient for producing these large amounts of mechanical force than the water-wheel and mill-stream of former days.

Why then is it that after a half-century of progress in the use of steam-power, during which steam-engines have undergone great improvements in efficiency, a return should now be not only thought of, but actually in progress, towards the methods of generating power that were in use at the commencement of the century?

The explanation lies in the fact that the engineers of the present time have at their command two machines which were unknown to, or little understood by, their predecessors. The first of these, the 'turbine,' was invented about 1801, but did not come into actual use on an extensive scale until late in the century; the second, the 'dynamo,' is an invention of the middle years of the century, and has received its greatest improvements during the last fifteen years. The former machine has enabled the modern hydraulic engineer to make use of any waterfall, however high, for the generation of power; and the latter has made it possible to transport the energy developed by the turbine to distances up to thirty-five miles, where it may be delivered to the factory or mill as simply and conveniently as water is delivered by pipes from a distant reservoir in the hills.

It is thus seen that it is chiefly due to the progress of electrical science that this new step forward in the utilisation of water-power has been made possible; and the development of the modern methods for tapping the almost limitless water-powers of the earth is therefore another triumph for the electrical engineer.

The turbine—the mechanical contrivance by which the energy of falling water is converted into mechanical energy—may be either a 'reaction turbine' or an 'impact turbine.'

The former is the more usual type, and is represented fairly adequately by the paper wheels mounted upon sticks which seem to have displaced toy balloons in the fancy of the rising generation.

toy balloons in the fancy of the rising generation. These toys are really 'air-turbines;' and the turbines by means of which great water-powers are now being utilised differ from these only in their size and material of construction. In place of a gentle current of air, one has a fierce and mad rush of water with which to deal; and paper is therefore replaced by thick castings of steel or bronze. The principle is however the same in both; for in the one case a gentle current of air, in the other case a wild rush of water, is the immediate cause of the revolution of the specially-designed wheel or turbine.

The turbines are always placed at the bottom of large and massively-constructed masonry chambers,

called 'wheel-pits.' The water is conducted to the turbines by enormously strong pipes known as the 'penstocks.' These pipes are generally vertical, and the strength at the turbine-end has to be much increased, to enable them to withstand the enormous pressure created by the weight of water which they contain. The water is carried away from the wheel-pits by 'tail-races.' These are open channels when the ground formation permits of this; but in some cases underground drains have to be made.

There are a very large number of water-power stations now in operation in Switzerland, Italy, France, Norway, and the United States, in which the 'reaction turbines' are being used to utilise heads, or volumes, of water that could not have been dealt with adequately by the older form of over- or under-shot water-wheel. Of these the most important are undoubtedly the two powerstations at Niagara; and some details of these may not be out of place here. The 'wheel-pit' of the 'Niagara Falls Power Co.' at Niagara is an enormous hole in the ground situated one-third of a mile from the upper river. The water is carried to the mouth of the wheel-pit by an artificial canal 250 feet wide by 12 feet deep. The 'wheel-pit' is 140 feet long by 18 feet wide by 178 feet deep, and is entirely cased with masonry. The vertical 'penstocks' which carry the water from the canal to the turbines at the bottom of the wheel-pit are constructed of steel-plates riveted together, and are 140 feet in height by 71 feet in diameter. The total pressure at the bottom of these pipes when they are filled with water is estimated to be between 40 and 50 tons. The turbines are massively-constructed wheels of bronze 5 feet in diamater; each wheel produces 5000 horse-power energy, or an amount equal to that produced by ten of the best and strongest locomotive engines ever built.

The wheel-pit at Niagara just described is planned to hold ten of these turbines; so that when all are in position 50,000 horse-power will be produced at this one power-station. The 'tail-race' by which the water from these ten turbines is to be carried away has been constructed through the solid rock, and is a tunnel 1½ mile in length, which opens on the lower reach of the Niagara River. This tunnel is 19 feet in width and 21 feet in height, and is therefore nearly equal in size to many railway tunnels. It is certainly a very noteworthy 'drain;' probably the largest in the world.

Turning now to the other form of turbine, the 'impact-turbine' or 'Pelton wheel,' we find that this is principally used in the mining districts of the United States, where very great heads of water have to be dealt with. It is also being used with steam-power; and the torpedo-catcher Turbinia which excited great attention, on account of its unequalled speed, at the recent Naval Review, was driven by one of these 'impact-

turbines.' Let the reader imagine a wheel constructed of twelve tea-spoons, with all their handles fixed radially around a common centre, all the bowls facing in one direction, and the whole firmly held together by a mass of metal extending halfway to the circumference. It is evident that if this be fixed at its centre so that it can revolve, and a jet of water or steam be allowed to play into one of the bowls at its circumference, revolution of the wheel will occur. An 'impact-turbine' is such a wheel, much magnified. The most notable of this class of turbines in existence are those used at Fresno in California, for developing 1000 horsepower from a 1400 feet head of water! The wheels used here are 5 feet in diameter, and the water used to drive them issues from a 11-in. nozzle with a velocity of 1000 feet per minute. This jet of water near the nozzle acts like a solid, and offers as great a resistance to any attempts to deflect it as a steel-bar of the same diameter. If this jet of water were directed against a man at any distance within 100 feet it would most certainly kill him by the mere force of its impact.

. Having described the two forms of turbine by which the energy of moving water is converted into the mechanical energy of a rotating wheel, it is necessary now to describe the modern method for transporting this energy from the bottom of a penstock at Niagara, or from some inaccessible valley in California, to a locality or district more suited to the successful conduct of industrial operations. It is here that the dynamo comes to the aid of

the hydraulic engineer.

A dynamo fixed on the shaft that is carrying one of these turbines of course revolves with it; and, as it revolves, currents of electricity are produced in the coils of wire of which it is largely composed. No explanation can be given here of the principles upon which the method of conversion of mechanical into electrical energy by the dynamo is based. It must suffice for the reader to know that it can be effected; and that ninety-five per cent. of the energy represented by the whirling wheel of the turbine can be obtained by means of the dynamo as electrical energy. This electrical energy may now be transmitted by 'air lines,' which are only telegraph wires on a much larger scale than that usually seen, as regards thickness of wire and strength of supports, to the factory or mill where it is to be used. If the locality where the water-power is situated is convenient and suitable for industrial operations this may be only a few hundred yards from the wheel-pit and power - house containing the dynamos; but in many cases this air-line extends to miles, and the transmission of electrical energy equal to many thousands of horse-power to distances of from five up to thirty-five miles is now an accomplished fact. There is a certain loss incurred in this transmission of energy, which increases with the distance; and it is still most economical to utilise the energy near the point where it is generated. Nevertheless energy

transmitted distances of from eighteen to twentyfive miles is being used in Rome, in Milan, and in Salt Lake City, because it costs less in these cities than energy generated by steam-power.

This is an enormous gain to industry; for the utilisation of the power can thus occur within a very wide radius of the spot where it is generated; and in selecting the site for a mill or factory it is possible to take into consideration the question of proximity to the markets for the raw or finished materials of the manufacture.

The uses for which the electrical energy developed from water-power is being employed are exceedingly diverse, and illustrate well the remarkable adapt-

ability of this form of energy.

In many cases it is used for lighting purposes. Geneva, Rome, and Milan in Europe are lighted by electricity generated in this way; while in the United States, Salt Lake City, Concord, Portland, St Paul, and Minneapolis are the most important examples of cities already lighted, or shortly to be lighted, by electricity derived from near or distant falls of water. Many examples of this method of utilisation on a smaller scale are to be met with in. the mining-towns of the Western States of America; and in Europe small lighting installations of a similar kind exist in many of the smaller towns and villages of Switzerland. The electricity may also be used to work tramway systems, and examples of this application of water-power are now to be seen at Buffalo and Salt Lake City, and at Montreux in Switzerland. Lyons will shortly have a similar system at work, with energy derived from the Rhone some miles above the

The electricity generated by means of water-power may also be used for carrying out electrochemical or electro-metallurgical operations on an industrial scale, and this is the use to which the greater proportion is now being applied. Aluminium is produced by two works at Niagara, two works in France, one in Switzerland, and one in Scotland, the aggregate horse-power consumed by these six works being at present about 15,000.

Chlorate of potash, the manufacture of which was until recently almost wholly in the hands of the South Lancashire chemical manufacturers, is now made by an electro-chemical process at one factory in Switzerland, one in Sweden, one in France, and one in the United States. Those who are qualified to judge believe that in another ten years the electro-chemical method will have quite supplanted the older chemical method of manufacture.

Calcium carbide and silicium carbide are two other compounds which are being manufactured on a fairly large scale by means of electricity derived from water-power. In the case of these the electrical energy is converted into heat in the electric furnace; and the manufacture is impossible in any ordinary furnace, because the

heat required to produce these compounds is so intense. In Canada, in Norway, and in Austria, wood-pulp for use in paper-mills is being produced by the aid of electricity derived from water-power. In this manufacture the electrical energy is used both for driving the machinery by which the wood is reduced to pulp, and also for bleaching the pulp in the final stages of production. The former demands mechanical energy, the latter chemical energy; electricity supplies both with the minimum of trouble, dirt, or expense.

The use of electricity for driving machinery has up to the present not extended much beyond an experimental stage in Europe; but in many of the mining-districts of the Western States of America the machinery is being driven in this way by electricity generated from centrally situated waterpower stations; and there is no doubt that in course of time the machinery in use for many of the smaller industries in the cities of Europe will be operated by means of electric motors and electrical energy from some distant water-power stations. Geneva and Lyons are the two cities at present taking the lead in this application of water-power.

The two schemes now being worked out on a practical basis at Niagara provide for the development of 100,000 horse-power. The machinery of many of our largest mills and factories does not require more than 500 horse-power to drive it. A busy manufacturing district will therefore, in course of time, be formed round Niagara. Since these works and factories will in but few cases require to burn any coal, one of the objectionable features of a manufacturing district of the present date-the heavy cloud of black smoke and sulphurous vapour-will be conspicuous by its absence. This is a gain only to be truly appreciated by those who have lived in a Manchester or Sheffield for long years of their life. But big as the Niagara scheme is, work has just commenced upon a still larger scheme of water-power development near Massena, on the St Lawrence River, U.S.A. It is intended to develop here 150,000 horse-power, by taking advantage of the difference in level between the St Lawrence River and the Grass River, flowing nearly parallel to it at a distance of 31 miles. A big canal is to be cut across the intervening plateau, and a fall of water fifty feet in height thus obtained on the bank of the Grass River. The latter river will itself form the 'tail-race' of the power station. This scheme dwarfs the Niagara one, since not only do the plans provide for a greater amount of power, but man is going to do what nature has done for him at Niagara-namely, provide the waterfall. The necessary capital for carrying out this scheme has been provided, work has been commenced, and it is hoped that some of the turbines and dynamos will be working by December 1898. If no unforeseen difficulties occur, and if this scheme be completed by the date named, it will certainly form

one of the most remarkable achievements of the

The significance of these facts relative to the utilisation of water-power for industrial purposes is chiefly an economic one. Water-power is in nearly every case cheaper than steam-power; and when the natural formation of the fall favours its exploitation for industrial purposes, water-power is greatly the cheaper of the two. Even at Niagara, where the initial cost has been extremely heavy, the electrical energy is being sold at a lower rate than it would cost to generate it on the spot, even with the best of modern steam-engines and cheap fuel. Now it is a curious fact that in Europe those countries rich in the possession of extensive coalbeds—namely, England, Germany, and Belgium—

are extremely poor in their possession of natural water-powers; whilst Switzerland, France, Norway, and Sweden—countries which have hitherto been of little importance in the industrial struggle on account of their lack of coal—have been highly favoured by nature in the number and magnitude of their water-powers.

This brief review of the principal applications of electrical energy derived from falling water shows that the modern methods for the utilisation of water-power have passed beyond their experimental stage; and that, great as the advance during the past six years has been, it may reasonably be expected to be surpassed by the developments that will occur during the remaining years of the century.

THE GURNARD ROCK.

CHAPTER V.



I the summer evening Captain Johns paced the pier at St Budoc, and frequently swept the sea with his binoculars.

'Any sign o' they valiant fighters?' asked Caleb Hocken the sailmaker.

'Nought in sight yet,' said the captain.

'Folks be takin' a brave notice o' this yer shindy; looks'ee to 'em—there's swarms on the pier; 'tis jest like a regatta-day.'

'Well, 'tisn't an ordinary common sort o' fight; 'tis most onusual, an' in a manner o' spaking 'tis unique!' The captain gave pompous emphasis to this last word, and his audience vaguely felt the appropriateness of the adjective.

'They ought to ha' been back hours ago,' he continued somewhat anxiously, 'for the tide's running out. 'Tis a hugly business from the start,

an' us ought to ha' prevented it.'

The sun went down behind Trevasse Point, and the great headland loomed in purple shadow against the western sky. A long gleam of light lay upon the water to the south of the point, and in that streak of radiance was a black dot. For some minutes the captain kept his glass upon the dot, and he looked puzzled.

"Tis surely the boat; but 'tis beyond me why they don't put up a sail, for the wind's made for 'em—an' they two fules went to the battle without

vittles.'

'Can 'ee spy the boat?' cried a chorus of eager voices.

'Iss—but I can't spy the men.' Then, after a prolonged scrutiny, he exclaimed, 'Bless my sawl an' body! the boat's drifting!'

'Then where be the chaps?' cried Jacob Trewarne,

'In the bottom o' the boat, I reckon,' suggested Nick Maddern; 'both of 'em dead-beat.'

'Get a boat out!' roared Captain Johns; 'quick, boys! Better take the Thyrza; her's fastest.' And as the young men hurried down to the beach he muttered, 'That durned launch o' Lloyds'd be useful, but the fire's out, an' emergencies don't give 'ee wan hour's notice,'

Within five minutes half-a-dozen tawny-sailed fishing craft were bearing towards the drifting boat, the swift *Thyrza* easily leading, the others following more from excited curiosity than any hope of assisting.

'Cap'n Jan, will 'ee let me peep through your glass?' said a low, wistful voice at the captain's elbow; and there stood Miriam Roskree, pale and troubled. Her fingers trembled as she took the binoculars, and she looked long in the direction of the boats.

'Wan o' your sweethearts, isn't 'a?' asked the old man drily.

'Iss, I believe he's my sweetheart,' she answered simply.

The girl came of a turbulent race; her family counted its generations of old-time smugglers; her own father, Richard Roskree, was seriously concerned in a fishing riot, and only evaded the assizes by a prolonged voyage abroad. Hereditary lawbreaking and violence may have influenced her character. She was passionate, and there was in her nature that Celtic clannish instinct that cleaves to its own, right or wrong. She was as proud of her birthplace, this little picturesque, evil-smelling Cornish fishing town, as if she were lady paramount of its blue waters and narrow streets. She was jealous of the honour of St Budoc. Once, when the lifeboat crew were gravely considering the possibility of a rescue in a sea that was white with fury, a girl's voice interrupted their deliberations: 'Be ee waiting for Porthillian?' And it was the taunt that launched the boat.

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uncommon. Gabriel had been a strange suitor; he was devoid of compliments, and had none of the flattering pleasantries that are dear to a girl's heart. There was an uncouth, jealous earnestness in his wooing that was not always acceptable. Miriam had never realised how much she loved the man till now-now, when her eyes were fixed on the darkening waters which bore that drifting boat betokening catastrophe. It was quite dark when the little flotilla returned, the Thyrza with the captured boat astern. When

provoked it.

they were within hail there was a chorus of shouting: 'What luck? Any sign o' the men?' And the answer came: 'No sign!' The Thyrza was Inn into the sandy beach, and a dozen men waded in to drag the empty boat ashore. 'Anything in the boat?' asked Captain Johns. 'Nought but the oars and two great stones,'

> cried Jacob Trewarne. 'Two great stones!' the words were taken up with a shrick in the voice of old Malachi Praze. "Tis a merracle! 'tis a judgment! Two men went forth in their pride and wickedness, an' what cometh back? Two stones! 'Tis verily the Lord's doing ! The frenzied old man spoke with such appalling

The tearing of the net by the Porthillian fisher-

men had stirred her like a personal wrong; and

like a personal shame she felt the seeming pusil-

lanimity of St Budoe in inadequately resenting the

outrage. Yet she now bitterly repented her wild

words that had instigated the outbreak of Gabriel

Lowry. The attack on the Porthillian man was

nothing but rude, unreasonable violence, and its

sequel at the best but a vulgar fight-and she had

Miriam had many wooers, for her beauty was

earnestness that for the moment his wild words carried conviction to the more credulous of his hearers, and the group of men and women shrank back from the boat they were peering and groping

'Two dead stones! 'Tis a sign o' judgment; 'tis a terrable warning!' continued Malachi, standing by the boat bareheaded, and looking like a dishevelled prophet in the shifting lantern - light; but his rhapsody was interrupted by the cynical Nick Maddern with the blunt query, 'How about the pair o' boots ?'

'They'm my poor son's boots!' cried Mrs Lowry, a tall, stout woman, stepping forward and clutching them eagerly. Then, as she moved away solbling, she caught sight of Miriam Roskree; and standing before the girl, pathetic but somewhat ludicrousfor she held a huge boot in either hand (the boots being indeed Tregenna's)-she asked, 'Where's my son?

And Miriam, proud as she was, cowered before the grief of the mother's face and voice.

That was a bitter night for Miriam Roskree, Five boats set out towards the Gurnard, in a hopeless quest for the missing men, and the girl vainly

begged to go in one of the boats. She returned to her home on the hill-slope; she patiently carried the supper to her querulous bed-ridden aunt; and sitting in darkness in the little parlour, she looked through the window out upon the water for the lights of the returning boats. The cloth was still upon the table that she had laid hours ago, and all her dainty preparations for the tea to which Gabriel Lowry was to have been invited. There were roses in a vase, and in the oven there was a neglected squab-pie, as cindery now as her own hopes; and the scent of the roses mingled with the burnt odour of the forgotten pie. So the long hours passed—the retributive hours, that chastened the soul of Miriam Roskree, and taught her the lesson of years in the space of one tragic night.

In the early morning, when many were astir to ask the one question that came first to the lip of every waking soul in St Budoc, Gabriel Lowry came into the town by the north road from Pengooney, in the horse-doctor's trap, whole and hearty, but ridiculous enough in borrowed garments all too brief for his long limbs.

Mrs Lowry was hysterically overjoyed when Gabriel opened her door; and the news of his return flashed through the town like magic. Mrs Lowry's kitchen was filled with inquirers, and those that could not get into the house made a semicircle around the door, and stared at Gabriel eating his breakfast, flinging a hundred questions at him.

'How about the fight?' asked Nick Maddern from the road.

'John Tregenna o' Porthillian is the best man,' answered Lowry; 'he's the best man by a brave sight.' But when pressed for details he became incommunicative, and his interrogators prudently forbore.

When Lowry went down to the beach to claim Tregenna's boat, Miriam Roskree, glad beyond words, stood at her door and waited his passing; but Gabriel strode straight on, as though he saw her not. She had sent him to fight, and there had been no fight; therefore he had no greeting for her. But Mrs Lowry saw the spasm of pain that swept across the girl's face, and, turning to her son, said, 'Gabe, I think you'd better turn back and spake to the maid.' And Gabriel Lowry turned back and spoke.

Next Sunday morning a strange scene of penance was enacted outside the Methodist chapel. It weighed upon the simple soul of Gabriel Lowry that there had been no requital for the blow he had given John Tregenna. He would have accepted defeat in the fight as a natural and proper quittance; but the blow remained a thing unexpiated. Wherefore he consulted Polreggan, who devised a solemn act of contrition.

There was a full meeting, for a rumour was abroad that Gabriel Lowry had mended his ways and was going to testify. When the congregation issued after the service Lowry was standing at the top of the steps, and he cried, 'Mr Polreggan, I call'ee to witness!' Polreggan came solemnly forward. 'Last Sunday morning, at this chapel-door, I struck John Tregenna o' Porthillian, with no good cause or reason, for which devilry I'm as sorry as a man can be that hath wronged another.' So far Gabriel had kept fairly to the prearranged formula of contrition, and Polreggan nodded benign approval; but the remainder of his speech was a departure from the programme, and the worthy old man had grave doubts of the seemliness of the whole matter. 'An' if any man hath aught 'gainst John Tregenna, anything o' ripping nets, or foul fishing, or lies o' that sort, I'm ready to testify for John Tregenna in my own way, man to man, anywheres, any day 'cept Sunday !'

In the following January, when the beneficent

south wind blew a phenomenal spring day into the heart of the winter, Gabriel Lowry married Miriam Roskree. Some folks shook their heads, as folks will; and old Mrs Chegwith said, 'Aw, well! they'm well mated—vire an' brimstone.'

And blithest of the guests was John Tregenna of Porthillian, all in his Sunday best, and looking, as was observed, 'as brave as a duke'—which may be taken as a high compliment to ducal comeliness. He did not come empty-handed, but brought tribute in a handkerchief, which, being proudly unknotted and removed, disclosed a shapely vase of polished serpentine, superb in colour—dark green, with blotches of black and veins of gray and white and red.

While the company encircled the table admiring the gift, Tregenna turned to Lowry, and said, 'My son Jan carved 'en out o' wan o' they stones us picked up on the Gurnard.'

THE SALONES OF THE MERGUI ARCHIPELAGO.



OR the facts in the following article (which have been supplemented by a government paper) Mr T. C. Loveridge, engaged in the pearlfishing in the Mergui Archipelago, Burma, is mainly responsible. He

describes a curious and little-known people, the Salones, of whom there seems to be between one and two thousand, living in jungles and boats mainly, in the Mergui Islands. They are very low in the social scale; and, as if they were not already low enough, we find a superior, or at least a stronger and more cunning, people coming in and depriving them of the fruits of their industry. Strong drink and opium are the baits. Mr Loveridge says in his letter accompanying his communication, that it 'puts shame into my own face as I think how completely the Chinese and Malays, the Chinese especially, have carried on a game to enrich themselves at the hands of these poor individuals, robbing the government at the same time.' The suggestion towards writing the article (which was done while waiting on his fishing-nets) came in this way. A brother fisherman had died of typhoid fever, and left him heir to some odd numbers of Chambers's Journal. These he perused in his boat, when the idea occurred to him of letting the outside world know through its pages something about his surroundings, and the hopeless degradation into which the Salones seem to have fallen.

The Mergui Archipelago forms part of the lower or Tenasserim division of Burma, which since 1826, by the treaty of the King of Ava with the British East India Company, has been under our government. The archipelago has been described as 'a cluster of islands and islets, with

bays and coves, headlands and highlands, capes and promontories, high bluffs and low shores, rocks and sands, fountains, streams, and cascades, mountain, plain, and precipice, unsurpassed for their wild and picturesque beauty.' The caoutchouc tree abounds, and the wild animals include the tiger, rhinoceros, and deer. The Salones dive for mother-of-pearl shells, spear fish, hunt the wild pig with their dogs, and eat yams, rice (which they get by barter), and a wild potato. They move from place to place, do not even cultivate a handful of rice, and although a stray missionary was amongst them in 1838, and again in 1846, every attempt to improve them seems to have been in vain. One visitor has said : 'The regeneration of this race will probably never be effected: but the Salones open a fine field to a truly philanthropic missionary.' Their boats of about twenty feet long are their homes; to his boat the islander 'entrusts his life and property; in it he wanders during his lifetime from island to island; a true ichthyophagist, for whom the earth has no charmthe earth-mother whom he neglects so much that he does not entrust to her a single grain of rice.' The children have a bad time of it; and, probably from their eating indigestible food, the mortality amongst them is great up till six years of age. The Salones know of no medicine; the mortally sick are often left to nature, and they depend for recovery on a kind of 'devil dance' round the sufferer, who is meanwhile dosed with drink, for the bad spirit within him is a thirsty devil, and needs copious supplies. The spirit is drawn out through the arm of the patient.

When a white man or a stranger appears, their first impulse is to decamp and hide in the jungle. At least the women and children invariably do so; while the food, such as sea-

slugs and rice, is hastily buried. Dr Heifer, after a visit in 1857, thus describes a group of She oreboo these people: 'There were about seventy men, The women, and children altogether. They had Havila encamped on the sandy sea-beach; each family what l had erected a little raised shed covered with palmin Sir leaves, where all the members huddled together line in Psychi for the night. There they sat, a dirty, miserableof a looking congregation, the women occupied in were making mats of a peculiar description from sealazine weed; the children screaming, apparently out of grave backs fear at the strange apparition; dogs, cats, and cocks all joining to make the full chorus. . . . lookit Some of these sheds appeared like butchers' stalls. under Large pieces of turtle, rendering the atmosphere get c pestilential, were everywhere drying in the sun; it is their main food. . . . On the beach lay very twenty or thirty boats, well built and light, like out

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be th caulked with palm hemp.'
In what follows we avail ourselves mainly of the notes by Mr Loveridge:

nut-shells swimming on the surface, the bottom

built of a solid trunk, the sides consisting of the

slender trunks of the palm strongly united and

Since 1892 I have been constantly living amongst these people. One day, when I left the pearling-grounds to lay the boat up to clean, I found myself among a number of other boats high and dry on the sandy beach, and small huts were visible in the flat jungle of Tenasserim Island. Although only a brief time elapsed between my rounding the corner of the bay and landing amongst them, more than half of the natives had already decamped. The only female left was an old woman nursing an old man. On putting a few questions to him I found that they had no method of worship, although there was slight evidence that some missionary had seen and talked to them. Their general answer is, 'We are a poor people who know nothing.' Gradually heads emerged from the jungle, and I was soon surrounded by inquisitive faces watching the effect of a dose of quinine administered to the old man.

My visit was successful as far as making friends was concerned, which was all the more remarkable as usually it was as much as their lives were worth to be visited by a mixed crew such as I had in my own boat. They gave me as many fish as were found sufficient for three meals, and returned to their camp. Next morning they surrounded my boat and asked that I should give the old man some more medicine. I met him coming off to me, looking much better. He had a family with him in his boat—sons, daughters, and sons-in-law—and several dogs. I gave a diving exhibition; and the sight of my men in the water, with heavy leads, boots, helmet, and dress, brought out the women even from the camp. The young women are lithe and handsome apparently up till twenty-five, when they age rapidly. At the least fright on their part they would jump overboard, swim ashore, and hide in the jungle. After the diving exhibition we all went ashore and became friends; but of the women folks only those who were mothers were to be seen. It was explained that the young women were away making mats in the jungle. I was introduced to a company making mats. The men gather a kind of pine-apple plant, which they split into ends from one to one and a half yard long and a quarter of an inch wide. These are dried in the sun, and the colour becomes a light pea-green. The lengths are then flattened out by being pressed between boards. When sufficiently flattened they cut them all at even lengths and begin plaiting, their fingers moving as quickly as women's fingers at home in knitting. The mats are in size from three feet by six and upwards. In barter they get about two ounces of rice for a mat three feet by six. Mats are their money; sixty purchase a boat and four a fishing-spear.

There are no means of knowing whence this strange people came. My own opinion is that they are a mixture of Malays and Siamese. They do not tattoo, like the Burmans, and their features are nearer the Malay than the Burmese; and their language has nothing of Malay about it.

In personal appearance these people are a fine and well-built race, strong in limb, and with fairly good features. The men are muscular and capable of hard work even in the full heat of the sun. They appear to live to a good old age; and the population seems on the increase. The young people are growing up as their fathers have done, without any training, education, or Christian influence.

Their marriage ceremony is simple enough. In presence of the elders a piece of white cloth is presented to the bride by the intended bridegroom, and the couple are man and wife. If he does not own a boat they go to that of the parents of the bride.

Although the waters of this archipelago abound, and have abounded, with mother-of-pearl shells, green-snail shells, beche-de-mer, and other marine produce, but little effort has been made under British control to ascertain the quantities found by the natives or the value of the beds if properly developed. The flat or mother-of-pearl shells are the largest and heaviest to be found in the London market, and are much sought after by Sheffield cutlers for knife-handles.

The dress of the Salones is certainly Malay, and is mainly a savong or loin-cloth. Vice, other than brutal intoxication, is actually unknown to them; and stealing, were they given to it, would mean stealing from their own flesh and blood. They are perfectly simple and harmless in every way. When any of their number dies, they take the remains, tie a lot of split bamboos together, and roll him up in that; and, generally speaking, make two triangles with sticks fastened together, driving the one end into the ground and placing the corpse on the top. They then put a grass

or leaf covering over the place. The knife, spear, box (if he has one), cloth, and all his earthly possessions are placed underneath the corpse. On leaving, a stick is always tied to a tree, with a small piece of white rag, showing to all that some one has been laid to rest there.

These people are able to dive in waters up to eleven fathoms, and at that depth they will swim along the bottom some yards until they secure a shell. When the shell or shells are secured they come up hands above head with the shells in them, get into the boat, and after a rest of two or three minutes repeat the operation. The men, women, and children all dive; the women in some cases turn out better divers than the men. I remember five years ago of a woman diving in ten fathoms of water between two islands where the tide runs very strong. About 10 A.M. she made another descent; and as she did not come up again, a number of the natives dived down at once to see the cause, but could not see anything of her. They reported that a shark must have carried her off; but my opinion is that a strong tide had borne her away. Nothing will tempt them to dive again in a place where a death like this has occurred. The children dive even better than their parents. Diving is only resorted to for the mother-of-pearl shell. This diving for shells is different from that practised at Ceylon. The green-snail shell is easily found; the snails weigh from half a pound to two pounds in weight, and are poked out of their holes with a small bamboo. Bêche-de-mer is always collected at low-water. The value of the mother-of-pearl shell is about £120 per ton, and it takes about 550 cleaned to make a ton. Bêchede-mer and pearl-shell have been in much demand in China, as also the fish, which has sold as high as sixty dollars per pound. The need of protection is evident, for the islanders are little the better of their good fortune, Chinese and Malay pirates plundering them without mercy. The usual method of these Chinese pirates was to drug the fishermen with spirits or opium and then plunder them of all they had, threatening that the victims' wives and children would be taken away unless they remained quiet and gave up everything. Besides opium, a liquor made from rice and the cocoa-nut palm, both strong intoxicants, has also been introduced, much to the hurt of the natives. For sixty-five years, or down to 1891, these rascally pirates have been able to hoodwink the authorities as to the value of the produce gathered from the wretched natives.

My first knowledge of the state of affairs was obtained once, when, emerging from the jungle, I saw a number of Chinese busy chopping wood and keeping a big fire going, while others were engaged in looking after some huge iron pans that were boiling over the fires. They were busy making toddy, which was in course of fermentation at the time. Many of the natives were already lying helpless on the beach, quite intoxicated, having actually taken the liquor hot from the pans.

Mergui is the centre of a very large fishing industry, and has a regular weekly mail service by steamers of the British East India Company. Chinese steamers have been calling for the past twenty years. An engineer, noticing the constant shipments of bags of shells to Penang as cargo, watched, and saw that a brisk trade was being done in them for London. This engineer embarked in the business himself, landing on Pawey Island, the most productive of the whole group. Afterwards he applied to the authorities at Maulmein for permission to fish for mother-ofpearl shells for one year, and had a small vessel fitted out from Singapore, with suitable diving apparatus. The district commissioner, however, who seems to have been overlooked in the first application for permission, caused trouble. Eventually the matter was arranged by the fishing rights in the district being put up for auction.

This was the means of opening the eyes of the government to the tons of produce which had been previously filched from the natives. Within a brief period of five years about one thousand tons of mother-of-pearl shells have been shipped to London, and about 300,000 green-snail shells annually.

It is to be hoped that something may speedily be done to ameliorate the condition of these interesting people.

THE MONTH: SCIENCE AND ARTS.

PICTURES FOR POSTERITY.



HE National Photographic Record Association has recently been formed, under the presidency of Sir Benjamin Stone, to carry out a most useful and unselfish work. The main idea is to collect photographs

of everything of national interest, and to deposit them in the British Museum, so that the future historian will have a copious pictorial library for purposes of reference. With this view the association has issued an appeal to those interested in the subject to assist in the work, which they can do by becoming members, by contributing photographs, or by acting as local agents or collectors. The large army of amateur photographers must now form a complete network over the country; and they, as well as professional workers, are asked to contribute anything of interest which may come under their notice. The pictures should be of a certain size, and must be printed by one of the permanent processes. Such particulars are set forth in the bylaws, a copy of which can be obtained from Mr George Scamell, the hon. sec., at 12 Hanover Square, London.

A PORTABLE SEARCHLIGHT.

At the last French army manœuvres a new form of portable searchlight was submitted to experimental trial, the object of the invention being to afford a means of discovering wounded men on the battlefield after dark. The lamp can be fixed on a stand or carried by a soldier, and will throw a beam of light in any direction required of such intensity that an object can be plainly seen on the darkest night at a distance of 250 yards. The French military authorities have not published any particulars regarding the lamp, but it appears to be a high-pressure jet, by which oil is ignited in the form of spray—a modification of the powerful lamps constantly used on constructive works in our own country.

JAPANESE MUSHROOMS.

Among the industries of Japan one of the most important is that of mushroom culture; but it differs so much from our own methods of growing this esteemed fungus that a brief account of the system may be of interest. The principal species of edible mushroom cultivated is known as the shiitake, and probably the peculiar system employed would answer with no other kind. Oaktrees from twenty-five to thirty-three years old are felled in the autumn, and scored with incisions by an axe at intervals of from three to four inches. The trees are subsequently cut into short lengths, and left in secluded parts of the forest. After a period of three years mushrooms begin to make their appearance in the incisions, and they afford a yield all the year round, but the autumn crop is the most valuable. In 1895, the last year for which returns are available, the export of mushrooms from Japan totalled up to nearly two million pounds' weight. An account of the culture has recently been made public by Mr R. P. Porter, who has been studying the industries of Japan.

THE TELESCRIPTOR.

A new telegraphic instrument is favourably reported upon as having been tested with great success in Berlin. It is called the 'Telescriptor,' by which we may at once assume that it delivers a written message, instead of one which must be translated from the signals of a moving needle, as in the commonly-used form of telegraphic apparatus. It seems, indeed, to take the form of an electric typewriter, with a keyboard upon which the message is fingered out by the sender, and a receiving instrument where it appears in type. The circumstance that Messrs Siemens and Halske have obtained the sole rights of

manufacture in Germany is a testimonal in favour of the new invention; but it must be remembered that several forms of writing and printing telegraphic messages have from time to time been brought forward, some of them most ingenious in design and effective in operation. They are, however, only known to students of telegraphy as machines which promised much but did not displace existing arrangements.

THE HANDMAID OF EXPLORATION.

Professor Flinders Petrie, the well-known Egyptologist, has made good use of the photographic camera in the course of his work, and lately, at the Camera Club, London, delivered a lecture under the title, 'Photography the Handmaid of Exploration.' He explained that it was particularly desirable to secure trustworthy records of all his Egyptian 'finds,' because the government exercised the very reasonable right of retaining for their own museum at Gizeh the pick of the objects discovered. His photographic work was accomplished under great difficulties, for he had a small army of men to govern, books to keep, and often had to do his own cooking, besides taking an active part in the actual labour of excavating. This left him little time for photography, and the pictures when taken had to be developed with a minimum allowance of water, that necessary being exceedingly scarce. In spite of these obstacles Professor Petrie was able to exhibit a fine collection of pictures, some of them representing objects which were at least five thousand five hundred years old. The wonderful state of preservation existing in things which we generally regard as perishable is due to the peculiar property of the dry sand in which they have been buried for so long. Thus, a workman's basket, with the original cords attached, was in as good a condition as when used fifty centuries ago; and the same may be said of specimens of papyrus of the same age, which are totally unchanged. Professor Petrie spoke well of his Egyptian workpeople, who would labour hard and willingly with encouragement and kindness.

ARCTIC EXPLORATION.

The good ship Fram, which carried Nansen on his memorable voyage to the polar seas, is to sail northward once more in June 1898, under command of Captain Sverdrup. This new polar expedition is organised under the auspices of the Norwegian government, who, besides lending the Fram, contribute liberally to the enterprise. The ship is now being overhauled and altered by Colin Archer, the Scotsman who built her, this being necessary in consequence of the larger number of both men and dogs which will accompany the expedition, Captain Sverdrup has far more applications from volunteers wishing to embark with him than he can listen to, and

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tin W in er er v among the number are many Norwegians of scientific attainments. The Fram will proceed through Smith's Sound, and will then sail along the north-western coast of Greenland until stopped by ice. Here she will take up her winter quarters, and expeditions in sledges will be sent to explore Northern Greenland and to ascertain the extent of the ice-floes. It is hoped that the voyage will not extend over two years; but food for double that period will be carried, in case of unforeseen need.

SEWAGE DISPOSAL: A NEW DEPARTURE.

For years it has been maintained that the sewage of London could be converted into a valuable fertiliser, and many systems have been experimented upon in this direction. But in the result it has been found better to take the 'sludge' fifty miles out to sea and there 'drown' it. The London County Council maintains a fleet of six vessels for this service; they carry on each journey a load of nearly one thousand tons of sludge, and made last year more than two thousand trips at a cost of upwards of £30,000. Now a new plan altogether is to be tried, and works are being pushed forward at Rotherhithe, where the method is to be tested. This new system aims at the conversion of the sludge into goodburning furnace-fuel, so that what is now so costly to throw away may be converted into a valuable commodity. The method is known as the 'Henry process,' and consists in drying the sludge-which contains ninety per cent. of moisture—on the surface of huge revolving hot-air cylinders, scraping off the dry film formed, and pressing the residue into cakes ready for burning. It is also intended to grind some of the residue to a fine powder, and to sell it for fertilising purposes. The experiment is an interesting one, and its results will be looked forward to anxiously not only by the London County Council, but by the representatives of all our larger towns and cities.

THE LARGEST TELESCOPE.

It seems to be only in the natural course of events that America should wish to have, and should secure, the largest telescope ever constructed; and for some years this has been the proud boast of the famous Lick Observatory. But there seems to be no finality in these things, and the Lick telescope is now altogether eclipsed by that which stands in the recently-opened Yerkes Observatory, which is situated seventyfive miles from Chicago, at Lake Geneva, and one thousand two hundred feet above sea-level. The objective lens of this huge instrument, which is forty inches in diameter and which weighs in its mount no less than five hundred pounds, presents the usual combination of crown and flint glasses, and has been made by the celebrated firm of Alvan Clark & Sons, of Boston. The steel

tube in which it fits, which forms the body of the instrument, is sixty feet long and weighs six tons. The entire instrument weighs twenty tons, and this mass has to be kept in motion by the action of clockwork, so as to keep pace with the rotation of the earth. The other necessary movements are secured by electric motors, so that the observer can point the huge instrument at any celestial object by the pressure of a button.

PRECAUTIONS AGAINST EARTHQUAKE SHOCK.

In the year 1857 there occurred a terrible earthquake in Italy, which destroyed several villages and killed ten thousand human beings. A full account of this disaster may be found in a book by Robert Mallet, who went from place to place and fully studied the phenomena exhibited. He writes of the catastrophe as 'an appalling mass of human misery, almost the whole of which was preventable by the exercise of proper care in choice of methods of house-construction in the earthquake region, and future repetitions of which might thus be completely avoided.' It is curious to note that Professor Milne, the leading earthquakeauthority to-day, is saying exactly the same thing with regard to the recent earthquake in Assam, by which fifteen hundred lives were lost and an enormous amount of property destroyed. He points out that Japan has suffered from far more severe earthquakes; but that, profiting by experience and guided by experiment, the engineers there, with their European colleagues, have gradually departed from the stereotyped system of building-construction in vogue in other countries. The result is that new buildings resist earthquake shock, while the old ones are gradually disappearing. The wise Japanese spend a large sum annually to assist a committee in investigating earthquake phenomena, a professor is employed at their university to lecture upon the best methods of building-construction in earthquake districts, and they have sent a special commissioner to Assam to report upon the recent earthquake there. Professor Milne urges the government of India to take a lesson from Japan.

THE CHINESE OIL-TREE.

In a recent report of the U.S. consul-general at Shanghai there is an interesting description of the Tung, or Chinese oil-tree. This useful tree grows to a height of about fifteen feet, and is of beautiful appearance, its leaves being vivid green and its flowers a pink-white. The seeds are poisonous, and it is from them that the oil is extracted in the most primitive fashion by wooden presses worked with wedges. The oil thus obtained is largely used all over the country in the manufacture of paint and varnish, for waterproofing paper and umbrellas, and in some districts for illuminating purposes. But its chief use is for caulking boats. On the submerged parts of vessels it is applied hot, but on other parts it is

or ten machines.

seed oil.

painted on in thin coats quite cold. All Chinese

boats are thus oiled twice a month, and so

are made to assume a glossy appearance, while

the wood is greatly preserved. Like most other

commodities, this tree-oil is often adulterated

before it is sold by retailers-chiefly with cotton-

A WEST INDIAN FRUIT.

long a most delicious fruit, new to Britain, will

be obtainable in our markets. This is the man-

gosteen, a native of the Moluccas, and cultivated

in Java and Ceylon. It has now been success-

fully grown in the West Indies, in proof whereof an experimental case of the fruit from there

has recently arrived in excellent condition in

London. The mangosteen is spherical in form

and about the size of a small orange. When the

rind has been removed a juicy pulp-as white and

soluble as snow-is revealed, and this has a most

delicions flavour, reminding one of the finest

nectarine, with a dash of the strawberry and pine-

apple combined. It is interesting to note that

this present from the West Indies is but a return

for benefits received, for the original plants which

are now bearing fruit were sent thither from our

PIERCING IRON WITH CLAY.

firing a tallow-candle from a gun through the

panel of a door, and can easily imagine the

feasibility of the feat, for door-panels are usually very thin and of soft wood. It is far more

difficult to believe in the possibility of using a

lump of clay as a projectile to penetrate an inch-

thick iron target; but this has recently been

done at Woolwich Arsenal in the course of some

experiments for the purpose of ascertaining the

condition under which gas is fired in mines. A

special form of gun was employed to represent a

bore-hole, and cylinders of clay were used to

imitate the tamping. Shots were fired in various

explosive mixtures of gas and air, coal-dust, &c.;

and, at a distance of twenty-five feet from the gun, an inch-thick iron target was placed at an angle, so that the clay could be broken up into

dust and scattered upwards. After the first three

or four shots it was found that the clay had gone right through the metal, and the hole was

We have all heard of the old experiment of

own Kew Gardens.

There is every reason to suppose that before

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A NEW TYPE-COMPOSING MACHINE. An enormous amount of ingenuity has been expended upon type-composing machines-much

of which has, unfortunately, brought no return for the labour and thought involved in the work.

After years of competition the Linotype machine

-which casts type line by line-seemed to re-

present the survival of the fittest. But it is now threatened by a serious rival in the Monotype, a recent American invention, which is being taken

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SCRIPTS, whether accompanied by a letter of advice or otherwise, should have the writer's Name and Address written upon them IN FULL.

4th. Poetical contributions should invariably be accom-

up in this country. The Monotype really comprises two machines-one of the typewriter form which punches holes in a ribbon of paper, and the other the casting-machine, which is operated by the slip so perforated. An expert operator can perforate, it is said, about fifty words a minute, and the type-casting machine-which is purely automatic-will turn out from 7000 to 10,000 letters an hour. It is claimed for this machine that, the types being separate, corrections can be as easily made as in the case of hand-set copy, and that one mechanic can look after eight

[The Editor regrets having printed in the number for October 9 a mutilated copy of Adelaide A. Proctor's A Woman's Answer, which was sent in, accepted, and paid for as an original contribution. When an explanation was demanded, the sender of the verses could only give the unsatisfactory reply that the poem had been bequeathed to him, with other papers, by a friend now deceased.]

TO A GIRTON GIRL.

(A RONDEAU.) I LOVED you once, two years ago; Then you were seventeen. I know Your blue eyes matched the summer sky, Your voice was like a melody. You smiled, sweet, when I told you so.

But now no glances you bestow Upon me when I whisper low. I can't forget, although I try,

Your head is full of Cicero, As leisurely to class you go. Since you've learnt Greek you pass me by, You are a Girton girl, and I Am but a frail, weak man. But, oh! I loved you once.

I loved you once.

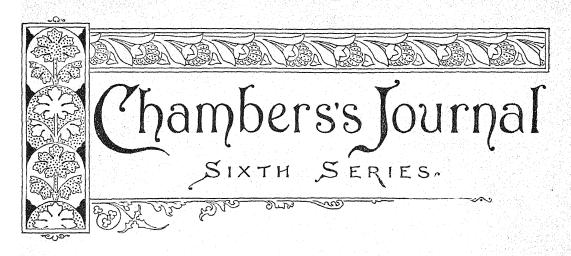
SISSIE HUNTER.

'THE BULLY OF HAIPHONG,'

BY GUY BOOTHBY, unavoidably held over from this Part, will appear in next issue.

* * TO CONTRIBUTORS. 1st. All communications should be addressed 'To the Editor, 339 High Street, Edinburgh.'

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THE BULLY OF HAIPHONG.

BY GUY BOOTHBY,

AUTHOR OF 'THE FASCINATION OF THE KING,' 'DOCTOR NIKOLA,' &C.

IN THREE PARTS-PART I.



OME one has put it on record, and with a greater amount of truth than is usually to be found in such assertions, that wherever the Frenchman goes he carries France with him. If this is the case anywhere

it may be said to be particularly so in French Indo-China. One might walk down the streets of Hanoi, Haiphong, Saigon - and, if we may go as far, shall we say Turane?-and, having put aside the native element and allowed for the difference in the temperature, and with a little stretch of the imagination, believe one's self in some small French country town. The magasins, the cafés, and the soldiery are all there; the slang is perhaps that of Paris of the year before last; there is a certain air of limp staleness about the gaieties that is not usually associated with the French character; but it is France for all that. And when one considers the reason it could scarcely be otherwise. The Englishman invades a new country, hoists his flag, and sets to work to build up history after his own fashion. Before he has been twelve months domiciled in it he has come to regard it as his permanent home, and has in a great measure adapted himself to and adopted what is best in the native way of living. The Frenchman, however, cannot do this. In the first place, he is in most instances Parisian to the marrow of his bones, and he carries indestructible prejudices with him. For, however long a time he may be settled in his new abode, he feels that he is not called upon to attempt in any way to promote its welfare beyond making it as much like the city of his adoration in its worst sense as it is possible for it to be. In this, though at first glance it would not appear so, there is a distinction with a decided difference, and in consequence the visitor is often hard put to it to get at the real

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meaning of things, and in nine cases out of ten leaves the place with an entirely wrong impression on his mind.

In Haiplong, for instance, with which my story is entirely concerned, this failing is even more pronounced than in the other places I have mentioned. The effect of the great French capital is to be felt from the moment one's vessel passes the house which the ambitious Paul Bert built for himself, until the low-lying coast-line has dropped astern again and French Indo-China has disappeared with it.

On the evening I am about to describe to you, the Café de France, the principal meeting-place of the port and the centre of such life as is to be found in Haiphong, was crowded to its utmost holding capacity. Every one who was any one was there. For the Messageries Maritimes steamer had arrived from Europe that afternoon, and she brought important news from home with her. It was a time of great political excitement in France; and the ripples of the commotion, like those made upon a mill-pond by a stone, reached across all those thousands of miles, and even agitated the inhabitants of that quiet colony of Tonking. So far the colonists had only had the barest outline by telegram; now there was a chance of hearing full particulars. Party feeling ran high, and when the mail-boat landed its cargo of correspondence the excitement was almost at boilingpitch. It was plain to the least observant that only the tiniest of sparks was needed to cause an explosion, and many of those present in the café that evening felt as though they were smoking their cigars in a powdermagazine. Amongst them were several passengers from the mail-boat, and these with but one exception formed the centres of attentive groups. The exception, however, sat apart, smoking his cigarette and sipping his coffee with a preoccupied air. [All Rights Reserved.] JAN. 1, 1898.

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v in f ii ii ii He was a tall young fellow, with a frank, attractive face, who might have been anything from twenty to five-and-twenty years of age. He was neatly but by no means fashionably dressed; indeed an intelligent observer would probably have noticed that he had not the appearance of being the possessor of much wealth. As a matter of fact he had been a second-class passenger on the steamer that had brought him to Haiphong, and even then had been compelled, by lack of means, to refrain from taking part in any of the little amusements which entailed even the smallest expenditure of money. But it must not be inferred from this that he was ashamed of his poverty. Far from it. On the other hand he bore himself with singular frankness and a modesty that had made him highly popular with those who had been able to cultivate his acquaintance. He was thinking now, in the midst of this gesticulating and vociferating babel, of the circumstances which had caused him to leave the small Normandy town, where only a year before he had embarked on the profession of a notary, to make the long voyage to such an out-of-the-world place as Tonking. As he followed this train of thought along it became evident that it was a pleasant one, for his eyes brightened and his fingers played merrily upon the table. He was without doubt a young fellow who, if the chance were vouchsafed him, would do his best to give a good account of himself in the world.

By the time he had smoked his cigarette and had finished his cup of coffee the excitement in the room had reached its climax. At first, having little or no party feeling, he had been amused; but, tiring of the noise and heat, at last he was about to rise and retire to his own hotel when an elderly man entered the room from the veranda at the farther end and approached the table at which he was seated. There was something about the appearance of this individual which interested the youth, and he also noticed that the other's presence had a sobering effect upon the majority of those present. And indeed he was a picturesque figure of a man, one who would be likely to attract attention in whatever company he might find himself. His height was considerably above the average, his frame spare but sinewy. His face was haughty to the borders of insolence, an effect which was increased by his bristling white moustache and imperial, upon which, it was plain, he was accustomed to bestow no small amount of attention. His hair was of the same venerable colour; and, as if to strengthen the impression already produced, he wore it rather longer than is usual save by poets or actors. As far as his dress went he was the pink of perfection, though it was plain to the least observant that his raiment had seen a considerable amount of wear. Hot as was the evening, he were gloves, and when he reached the end of the room, and turned to survey those present, he held a gold-rimmed eyeglass to his eye. After a close and searching scrutiny, under the influence of which many of those near him quailed visibly, he seated himself at a small table to the right of that at which the youth was sitting, and called a servant. Then in a stern voice he ordered a glass of absinth, and, as soon as the materials were brought, drew off his gloves and proceeded to mix it, frowning prodigiously meanwhile. This delicate operation having been completed to his satisfaction, he placed his hat on a chair beside him, and rose to his feet. Then raising his glass and speaking in a voice that penetrated to every corner of the room, he said very distinctly, so that there might be no pretence on the part of the company present that they had not caught his meaning, 'I drink to France and to the restoration of the Monarchy.' Having done so, he replaced his glass upon the table, and glanced round the room in the hope of finding somebody boasting sufficient audacity to take up the challenge he had thrown down. No one, however, seemed desirous of gratifying him in this respect, so he resumed his seat and continued to sip the decoction he had mixed for himself, smiling scornfully as he noticed the sudden hush that had descended upon the room. He knew his power and was never tired of exercising it. Fate, however, was going to furnish him with a victim before the night was

He had well-nigh finished his drink, and was beginning to think of leaving the place, when a small, stout man of the true French functionary type came up the central avenue between the tables, and, without looking at the man who was already seated there, sat down and called a garçon. Having given his instructions, he turned himself about and realised for the first time who his companion was. His astonishment and dismay were boundless: his mouth and eyes opened beyond their natural extent. and for a moment he gasped for breath. In all probability he would have got up and moved away, but that he was afraid by so doing he would give offence to the very man he most wished to conciliate. The other noticed the effect he had produced, and, from the cruel smile that made its appearance upon his face, it was evident he found some satisfaction in it.

'Bon soir,' he said, with a graceful inclination of his head. 'It is sometime since I last had the pleasure of seeing monsieur. Now, however, we meet on an occasion of considerable importance. You have heard the news of course?'

This question was exactly what his companion had dreaded. The young man at the other table watched his face and noticed that it had grown even paler than before.

'I have heard something,' he replied, in what was intended to be a conciliatory tone, 'but, ma foi, if one is to believe all one hears we shall have enough to do in this world.'

The man with the gray moustache and the cruel eyes leant a little forward and tapped with his

fingers softly upon the marble top of the table. As he did so he frowned ominously.

'Monsieur, I trust, will forgive my saying so,' he began, 'but that very lack of interest has brought our glorious France to its present low ebb. How can we hope to win back our self-respect when the greater portion of our countrymen refrain from showing any active interest in the management of its affairs? Had I my way I would deal summarily with such people. You, yourself, monsieur, who have so much at stake, and who'—

'I beg your pardon a thousand times, Monsieur Desrolles,' interrupted his wretched companion, 'but I fear you do not quite comprehend my

'In that case monsieur must pardon my stupidity,' returned the other with elaborate sarcasm, the frown meanwhile increasing upon his forchead. 'I regret you should not consider me capable of discussing the present somewhat complicated political situation with you. Whatever may be said of me behind my back, it is the first time I have been told to my face that I am losing the keenness of my faculties. Perhaps you will be good enough to say so in as many words, in order that there may be no further misunderstanding between us. I shall then know how to deal with you. One does not like to think one is in one's dotage. Nevertheless, I agree with you that old men are better out of the way.'

By this time large beads of perspiration were standing upon the other's forehead, and more than once he moistened his dried lips with his tongue. But Desrolles would not give him an opportunity of speaking. He was playing with him as a cat does with a mouse. Once he dropped his right hand beside his chair, and as he did so he gave a peculiar twist to his wrist, as if he were practising a somewhat intricate thrust with a foil. This action, you may be sure, was not lost upon his companion, who, in the hope of turning the torrent of his speech, hastened to change the conversation by inviting him to join him in another glass of absinth. Desrolles, however, received the invitation with less alacrity than the other had hoped he would show.

'Monsieur is kindness itself,' he said; 'but if my brain be as clouded as you were just now good enough to suggest, it would be most unadvisable that I should render it more so by exceeding my usual allowance.'

'I beg that you will not believe that I meant such a thing,' burst in the other, with a vehemence and obsequiousness that at any other time would have been ludicrous. 'The sharpness of Monsieur Desrolles's intellect is far too well known in Tonking ever to have such an insinuation made against him. What I did mean to suggest was that beyond reading in the paper the first vague rumours of what had taken place in Paris, I knew nothing. That I take an absorbing interest in it I must beg you will not doubt. Indeed it was with the inten-

tion of learning the latest details that I came here to-night.'

Desrolles was graciously pleased to accept the explanation and to recover his equanimity. The change in the other was instantaneous; but having got safely out of the fire he had not the wit to take advantage of his opportunity and withdraw altogether from the scene. On the contrary, he seemed so emboldened by his good fortune that, under the influence of a momentary self-conceit, which he had occasion almost instantly to regret, he ventured an opinion on the topic which was just then absorbing the attention of the room. He was 'out of the frying-pan into the fire' with a vengeance now. In the innocence of his heart he praised the sagacity and foresight of the party then in power. Desrolles heard him out with a sarcastic smile upon his face.

'It is evident,' he said, when the other had finished, 'that you know nothing at all of what you are saying, and it is also quite plain to me that you forget in whose presence you give vent to such utterly unfounded assertions. The men you call statesmen-bah! I will not defile my mouth with the mere mention of their names. What are they? Who was it got us into difficulties over that precious business in '67? Why, the man you are now lauding to the skies, Berritant. Who made us the laughing-stock of Europe in '791 Why, the man you call a born statesman! Who would have sold us to the Germans in the '80's had he been permitted an opportunity, but De Saldenhac? Sapristi! Monsieur, it seems to me that the disgrace of'-

He paused for a moment, interrupted by a sound which came from the table at which the young man who had landed from the mail-boat that afternoon was seated. The latter had risen from his seat, and, with a face white as the marble top of the table before him, was approaching the man who had just made himself so conspicuous by his denunciation of the ministry.

Seeing that something was about to happen, and that there was every probability of trouble, there was a general stir in the room, and those present drew nearer in order that they might witness what promised to be an exciting scene. Reaching the table, the young man paused for a moment while he attempted to recover his self-possession. Under the influence, however, of Desrolles's cruel eyes he found that such an attempt was useless.

'You seem to have something on your mind, mon ami,' said the latter as he gave a twirl to his fierce moustache and looked him up and down. 'Perhaps the heat of the room is too much for you, and you would be better on the veranda. You must be careful how you excite yourself in this climate.'

'It is not that, it is not that,' cried the young man. 'You have insulted one for whom I have the greatest esteem, and I demand from you an instant apology.'

The crowd about them stared at each other in

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blank amazement. It was plain to all of them that this stranger youth, whoever he might be, had not the least notion of the reputation of the man he had taken upon himself to beard. They glanced first at him and then at Desrolles, who was still leaning back in his chair twirling his moustache with exaggerated insolence, at the same time affecting to be deeply concerned at the scene he had occasioned.

'Monsieur must pardon me,' he said, in the clear cutting tone that the rest of the room knew so well, 'if I do not quite realise the situation. Monsieur has taxed me with insulting his friend. Perhaps it would be as well if he would state which of those I named has the honour to consider him his champion.'

'You stated that Monsieur de Saldenhac would have sold us to the Germans in the '80's had he found an opportunity. I say that Monsieur de Saldenhac is my friend, and that when you bring such an accusation against him you lie, and I repeat I demand from you an instant apology.'

Describes laid himself back in his chair, and once more looked the young man over. The points of his moustache by this time reached almost to his eyes.

'This is really very interesting,' he said; 'and pray who may you be who with such assurance set yourself up as the friend of the Minister for Foreign Affairs? I cannot remember ever having had the honour of seeing your face before.'

'It does not matter in the least who I am,' replied the young man; 'but when you bring such accusations against an honourable man you lie and must be punished for it. I insist upon your withdrawing the assertion you made just now, and at once.'

'Pardien! young as you are, you crow very loud, my friend,' said Desrolles. 'It seems to me you are a bantam whose comb would be none the worse for a little cutting. When you are older, if you ever grow older, you will learn that it is not wise for youths to talk in this fashion to those

of maturer years. Instead of your hurting me be thankful that I do not punish you as you deserve.'

'You have not done as I told you,' cried the young man, who was now almost beside himself with passion. 'Since you speak untruths of a man who is not here to defend himself, it is evident that you are a coward as well as a liar, and thus I show my contempt for you.' So saying, he drew back his arm, and, before any of those about him could prevent it, had struck the other a violent blow on the cheek. The look on Desrolles's face changed as if by magic. He seemed to grow a foot taller; and his expression, from being merely contemptuous, became absolutely fiendish.

'That is enough, young man,' he cried, springing to his feet like a wounded lion; 'with that blow you signed your death-warrant. I have put up with your insolence too long. To-morrow morning I will kill you with as little compunction as I would a pigeon.'

The young man, however, was still too much under the influence of his anger to have very much care for the dangerous position into which he had got himself. He glared at his enemy with flashing eyes and heaving chest.

'As you will, sir,' he said, with an attempt at calmness. 'I am prepared to abide by what I have done. I am a stranger; but if there is any one present who will act for me, the necessary preliminaries can be arranged without further loss of time.'

A young officer of the line who had witnessed the whole fracas, and who was conversant with Desrolles's character, immediately stepped from the crowd and approached the youth.

'If monsieur will accept my services,' he said, 'I will place myself at his disposal with the greatest pleasure. My name is Gustave Thielbert, lieutenant of the 283d Regiment.'

'I am sincerely indebted to you,' said the other, and a moment later they had left the café together.

REVELATIONS OF THE SOUTH AMERICAN CATTLE-TRADE.



W persons outside the comparatively narrow circle of those acquainted with the transit of live-stock from South America to England have any idea of the unspeakable horrors enacted on board the vessels engaged

in this trade. Were these fearful scenes of death and slaughter among the live-stock more universally known, public opinion would long ago have insisted upon the enactment of preventive regulations like those which have had such salutary effect in the North Atlantic cattle-trade. The vessels engaged in this department of over-sea commerce mainly make their homeward voyage from

the River Plate to Liverpool, and bring large consignments of cattle and sheep from Monte Video and Buenos Ayres to meet the deficit in our home meat-supply. Some of the steamships engaged in the Plate trade are specially built for the purpose, and duly fitted with the machinery necessary to carry large consignments of live-stock on the homeward trips. Unfortunately, however, many of the vessels so engaged are of the 'tramp' order—that is, they trade here, there, or anywhere, wherever in fact a cargo is forthcoming; and it is upon these vessels that the shameful scenes of death and slaughter occur.

A glance at the map shows that the voyage from

the River Plate is necessarily a long one. The distance is close upon seven thousand miles, and the time occupied averages about thirty days. But it is not the distance alone which is detrimental to the sea-transit of live-stock. It is the vicissitudes of climate which are experienced en route. The vessel may leave the River Plate during the southern summer, have a stifling journey through the tropics, and then as she approaches British waters encounter the full rigours of the northern winter. The North Atlantic trade is conducted along the same latitude, and roughly there is no climatic difference between the place of origin, sea-route followed, and final port of destination. But in the Plate trade all is different. Cattle and sheep raised on the subtropical plains of the Argentine Republic are hurried on shipboard, transported through the hottest part of the Atlantic Ocean, to face the cold winds of the English winter. But to realise aright the miseries to which these innocent ministers to human necessity are subjected some knowledge of the conditions under which they are shipped is requisite.

The Argentine government has a code of regulations which is supposed to impose a check upon overcrowding or other conditions of carriage calculated to militate against the safety of ship or live-stock. Unfortunately, however, the officials entrusted with the enforcement of these rules are hardly noted for their probity. Their interpretation of the regulations is in many cases entirely dependent upon the 'backsheesh' they receive from the shippers. There is a reprehensible custom, too, followed by many owners of tramp boats of letting the whole deck-space of their vessels for a lump sum. This is perhaps the most regrettable feature of the whole trade, for the exporters, in accordance with the terms of their agreement, simply crowd cattle in every nook and corner of the vessel's decks, while on a wooden platform over and above all are carried the unfortunate sheep.

Now, it is obvious that there are places on a vessel's deck upon which cattle should not be carried if their safety and the proper working of the ship are to be considered. Cattle, however, are carried over hatches and even over winches. The captain of such a ship is quite powerless to prevent this overcrowding, although he well knows that the crew are endangered by the enhanced difficulty of working the ship. On such a boat the officer on the bridge looks forward on to a flock of sheep exposed to all the winds that blow and the seas which may come aboard the vessel; aft his range of vision lies over the same floating farm-yard; while below him are the cattle-pens with their bellowing, uneasy inmates.

For a time all may go well; the cattle get accustomed to their new surroundings and begin 'to pick up a bit.' Frequently, however, bad weather comes on, and then a few short hours suffice to convert the vessel's decks into a veritable shambles. Often the fittings are of the flimsiest character, and as the ship rolls and pitches they carry away: and the now unprotected inmates of the pens are thrown hither and thither as the vessel rolls to port or starboard. To add to the confusion, a heavy sea may come aboard, and after sweeping dozens of unfortunate sheep away, complete the hideous scene taking place on the cattle-deck. The picture as sketched to the writer by an officer who had witnessed it, not once nor twice but many times, is horrible in the extreme. Imagine a score or two of helpless cattle dashed from one side of the ship to the other as the vessel rolls from port to starboard and starboard to port, amid a ruin of smashed pens, with limbs broken from contact with hatchway combings or winches, dehorned, gored, and some of them smashed to mere bleeding masses of hide-covered flesh; add to this the shriek of the tempest, the impossibility of the crew getting from one part of the ship to the other, and the frenzied moanings of the wounded beasts, and the reader will have some faint idea of the fearful scenes of danger and carnage occurring on these floating farm-yards.

A few months ago a cattle-laden steamer homeward bound from the River Plate lost half her cattle and nearly all her sheep in one short three-quarters of an hour, and that when she was well off the English coast. A strong gale sprang up, accompanied by a heavy sea, and the captain, after running before it as long as he thought it safe, deemed it advisable to bring the vessel round so as to meet the heavy seas bow-on. It was while performing this manœuvre that the vessel was swept and the mischief done. That such a nautical tragedy is of no unusual occurrence the following particulars of recent losses will show.

The figures quoted refer to Liverpool-bound ships with consignments of South American cattle and sheep on board. In each case the loss referred to is of recent occurrence, the voyage having been made during last year. The Sola lost 21 cattle out of 110 carried; Cranford, 31 out of 150 shipped; Hydarnes, 66 out of 289; and Brookside, 103 out of 140. This same vessel is credited with having shipped 758 sheep, of which number she brought into the Mersey no more than 78! The Alfalfa lost 59 cattle out of 109 and 396 sheep out of 599. The Highland Chief lost 43 cattle out of 150 placed on board, and the Hippomanes the same number out of 280. From the Magdala 98 cattle were lost; while the Oceania discharged 118 less than she took on board; the Port Melbourne, 39; the Austrian, 105; the Ribston, 71; the Nyanza, 198; the Endeavour, 94; the Julia Park, 189; and the Atlantic, 87; while the Quantock, which left the River Plate with 395 cattle and 1200 sheep on board, brought into the Mersey 69 cattle and 394 sheep less than the number shipped.

Such are some of the losses incurred by Liverpool-bound steamers during last year, from which it will be seen that the annual waste from these cattle-carriers must attain enormous dimensions. She forebod
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Such losses are by no means an inevitable necessity of this trade, as some regular liners engaged can carry cattle year in year out and incur an average loss of under three per cent. Their fittings, however, are of a stable character, and the vessels are built with a special view to the work they will be expected to perform. In England there are two forces at work aiming at the reform of this trade. The officials of the Board of Agriculture examine the fittings of each cattle-boat and see that they comply with the regulations as to strength and material used, number of animals carried in each pen, &c. But so long as a large section of the trade is conducted by occasional or tramp boats, whose cattle-fittings are intended for use on a single voyage only, it is obvious that there is a great inducement to practise economy.

In many cases, too, the fittings are provided by the shipper, and the unfortunate captain, though he knows that the law is being contravened and that he will be prosecuted on arrival in England, has no voice in the matter. The other factor which aims at the betterment of the South American eattle-trade is the Royal Society for the Prevention of Cruelty to Animals. Its officers board the eattle-boats as they arrive, and invariably prosecute whenever they find a mained or otherwise wounded beast on board.

It must not be thought that all the losses quoted are due to bad weather. Many of the cattle die not through the violence of the weather. They are simply suffocated through being packed in the ill-ventilated and confined tween decks. If anything, the scenes enacted in these regions of the vessel, especially on the occasional boats, are even more horrible than those in which wind and sea are the principal actors. When a beast carried in the 'tween decks, especially in the more inaccessible sections, dies, it is a work of great difficulty to remove the carcass from the pen along the narrow, and it may be intricate, passage to where it can be thrown overboard. It often happensmore frequently than not - that the cattlemen refuse to touch the carcass. They have been engaged to look after live cattle, not to haul out dead ones, &c. The sailors refuse point-blank to interfere, pleading that they are not paid to do cattlemen's work, but to navigate the ship. Thus the work devolves in many cases upon the officers, who cannot refuse, as they have situations to lose; and terribly repulsive work it is. The stench in this fetid atmosphere is described as 'horrible;' the dead beasts, advanced perhaps in decomposition before death ended their sufferings, are often removed literally in pieces, so cribbed and cabined is the space in which they are carried. And when it is remembered that the mortality in the 'tween decks is greatest while the vessel is steaming through the tropics, the reader's imagination can easily fill in the horrible details of the scenes enacted in the 'tween decks of a South American cattle-boat.

Sharks are, according to the older nautical writers, credited with some occult means of knowing when a corpse was carried on shipboard. Small wonder, then, that these cattle-laden vessels should be accompanied through the tropics by these terrors of the sea. One shipmaster, a bit of a wag, avers that on each voyage homeward he looks to picking up a family of sharks with as much regularity as he would pick up a pilot. He never likes to disappoint them, and assures us that by some means or other they must be acquainted with his firm's sailing-bill, so punctual is their appearance at the same spot. They accompany the vessel for six or seven days, and then, gorged and sated, return to their usual haunts until next they wish to vary their fish-diet with a little beef or mutton.

The marine insurance companies are now realising by bitter experience the risks of the South American cattle-trade, and are determined to discountenance the practice of carrying cattle in the 'tween decks, twenty-five per cent. being the premium required to insure this section of a consignment. It is, however, the government authorities who must move if the shameful barbarities of the trade are to be checked. It is not possible to insist that large vessels of the North Atlantic cargo lines type should be employed in the trade; but it should be possible for the legislature to insure that the steamships engaged should be so far adapted for the live-cattle trade as to carry cattle and sheep without subjecting them to the fearful cruelties which are, to say the least of them, a disgrace to our boasted civilisation. Should legislature persist in refusing to interfere, there are not wanting signs that an outraged British public will take the matter into its own hands and insist that British owners should no longer connive at such cruelties or British vessels reek with 'the uncleanly savours of a slaughter-house.'



JOHN BURNET OF BARNS.

By John Buchan.

CHAPTER V .- continued.



TOLD my father all that I could think of, and then asked how he had fared in my absence—for I had had but few letters—and what of note had happened at Barns.

'Ay, John,' he said, 'I'm an old man. I fear that my life here will be short. I scarce can get outside without Tam Todd to lean on, and I have little sleep o' nights. And John, I could wish that you would bide at home now, for I like to see you beside me; and you'll have learned all the folk of Glasgow have to teach you. I once wished you a soldier, but I am glad now that I let the thing blow by, for I would have cared little to have you coming here but once in the six months for a flying visit.'

'Nay, uncle,' said my cousin, 'you do not put the matter fairly. For myself, I believe there is none busier in Scotland than I; but, gad, I have always time to slip home to Eaglesham for a day or two. But my father would care little though he never saw me but once in the year, for each time I go back I get a long sermon on my conduct, with my expenses for the year as a text, till I am fairly driven out of the house for peace.'

At this my father laughed. 'Ay, ay,' said he, 'that's like my brother Gilbert. He was always a hard man at the siller. Man, I mind when we were both the terrors o' the place; but all the while not a thing would he do if it meant the loss of a bodle. Pity but I had taken after him in that, and John would have been better supplied to-day.'

'Oh,' I answered, 'I have all I need, and more.' Hereupon my cousin spoke with a sneer in his voice. 'A groat is enough for a scholar, but the soldier must have a crowu. Your scholar, as doubtless John can tell, is content if he have a sad-coloured suit, some musty books, and a stoup of bad wine; but your fine gentleman must have his horses and servants, and dress himself like his quality for all the maids to stare at, and have plenty of loose silver to fling to the gaping crowd; and he is a poor fellow indeed if he do not eat and drink the best that each tavern can give. As for me I would as soon be a clown in the fields as a scholar, with apologies to my cousin;' and he made me another of his mocking bows.

I answered as gently as I could that gentrice did not consist in daintiness of eating and drinking or boisterous display, and that in my opinion nothing gave so fine a flavour to gentility as a tincture of letters; but my father changed the conversation by asking Gilbert what he had been after that day.

"Faith, it would be hard to say,' said he. 'I got a gun from that long-legged, sour-faced groom, and went up the big hill above the trees to have a shot at something. I killed a couple of hares and sprung an old muirfowl; but the day grew warm, and I thought that the wood would make a pleasant shade, so I e'en turned my steps there and went to sleep below a great oak, and dreamed that I ran a man through the breast for challenging my courage. It was an ill-omened dream, and I expected to meet with some mishap to account for it ere I got back, but I saw nothing except a lovely girl plucking primroses by the water-side. Zounds, Jack, what a fool you must be never to have found out this beauty! She had hair like gold and eyes like sapphires. I've seen many a good-looking wench, but never one like her.'

"'And what did you do?' I asked with my heart beating wildly.

'Do?' he laughed. 'Your scholar would have passed in silence, and written odes to her as Venus or Helen for months; whereas I took off my bonnet and made haste to enter into polite conversation. But this girl would have none of me; she's a rose I warrant with a pretty setting of thorns. She tripped away; and when I made to follow her became Madame Fine-airs at once, and declared that her servants were within easy reach, so I had better have a care of my conduct.'

My father shot a sharp glance at me, and addressed my cousin: 'The maid would be Marjory Veitch, old Sir John's daughter, at Dawyck. He, poor man, has gone to his account, and her brother is abroad, so the poor girl is lonely enough in that great house. John and she have been friends from the time they were children. She has come here too, and a pretty, modest lass she is, though she favours her mother rather than her father's folk.'

At this intelligence my cousin whistled long and low. 'So, so,' said he, 'my scholar has an eye in his head, has he? And Dawyck is not far off, and—well, no wonder you do not care for the military profession. Though, let me tell you, it is as well for the course of true love that there are few cavaliers in this countryside, else Mistress Marjory might have higher notions.'

I answered nothing, for though I loved Marjory well and thought that she loved me, I had never spoken to her on the matter; for from childhood we had been comrades and friends. So I did not care to reply on a matter which I regarded as so delicate and uncertain.

My cousin was a man who was sorely vexed by receiving no answer from the object of his

better.

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scrupled to fling the lie in his teeth, and offer to settle the matter on the spot. But I did not wish to excite my father in his feeble health, so I made no reply beyond saying that events would show the better man. My father, however, took it upon himself to defend me. 'Peace, Gilbert,' he said. 'I will not have my son spoken thus of in my own house. He has as much spirit as you, I'll warrant, though he is less fond of blowing his own trumpet.' I saw with annoyance that my father plainly thought my conduct cowardly, and would have been better pleased had

> the man was our guest and my cousin. When we rose from supper I assisted my father in walking to his chair by the fire; for, though the weather was mild and spring-like, his blood was so impoverished that he felt the cold keenly. Then my cousin and myself strolled out of doors to the green lawn, below which Tweed ran low and silvery clear. I felt anger against him, yet not so much as I would have felt towards another man had he used the same words; for I knew Gilbert to be of an absurd, boasting nature, which made him do more evil than he had in his heart. Still my honour or self-love (call it what you please) was wounded, and I cast about me for some way to heal it.

> I struck my cousin then and there; but I knew

how cruelly excited he would be by the matter.

and in his weakness I feared the result. Also

witticisms; and perhaps on this account he went

further than he meant in his irritation, 'Nay,

John,' he went on, 'you're but a sorry fellow at

the best with your tags from the Latin and your

poor spirit. I am one of the meanest of His

Majesty's soldiers, but I can outride you, I can

beat you at sword-play, at mark-shooting, at all

manly sports. I can hold my head before the

highest in the land: I can make the vulgar bow

before me to the ground. There are no parts of

a gentleman's equipment in which I am not your

Now, had we been alone I should not have

'Gilbert,' I said, 'we have both done much work to-day, so we are both about equally wearied.'

'Maybe,' said he.

But your horse is fresh and a good one, as I know; and you are a good horseman as you say yourself. You had much to say about my poor horsemanship at supper. Will you try a race with me?'

He looked at me scornfully for a minute. 'Nay, there is little honour to be got from that. You know the ground, and your horse, for all I know, may be swifter than mine. It was not of horses I spoke, but of the riders.

'In the race which I offer you,' I answered, *we will both start fair. Do you see you rift in the hill beyond Scrape. It is the Red Syke, a long dark hole in the side of the hill. I have never ridden there, for the ground is rough and boggy, and I have never heard of a horseman

there since Montrose's rising. Will you dare to ride with me to yonder place and back?'

At this my cousin's face changed a little, for he had no liking for breaking his neck on the wild hills. And now, when I look back on the proposal, it seems a mad, foolhardy one in very truth. But then we were both young and spirited and reckless of our lives.

'Mount and ride,' said he. 'I'll be there and back before you are half-road, unless, indeed, I have to carry you home.'

Together we went round to the stables, and I saddled a black horse of my father's, for Maisie had already travelled far that day-the Weasel we called him, for he was long and thin in the flanks, with a small head and a pointed muzzle. He was viciously ill-tempered, and would allow no groom to saddle him; but before I had gone to Glasgow I had mounted and ridden him bareback up and down the channel of the Tweed till he was dead-beat and I half-drowned and shaken almost to pieces. Ever since this escapade he had allowed me to do what I liked with him; and though I did not find him as pleasant to ride as the incomparable Maisie, yet I knew his great strength and fleetness. My cousin's horse was a good cavalry charger; strong, but as I thought somewhat too heavy in the legs for great endur-

We mounted and rode together out among the trees to the fields which bordered on the hills. I was sore in the back when I started, but after the first half-mile my sprightliness returned, and I felt fit to ride over Broad Law. My cousin was in an ill mood, for the sport was not to his taste, though he felt bound in honour to justify his words.

The spur of Scrape which we came to was called by the country people the Deid Wife, for there an Irishwoman, the wife of one of Montrose's camp-followers, had been killed by the folk of the place after the rout at Philiphaugh. We had much ado to keep our horses from slipping back, for the loose stones which covered the face of the hill gave a feeble foothold. The Weasel took the brae like a deer; but my cousin's heavy horse laboured and panted sorely before it reached the top. Before us stretched the long upland moors, boggy and cleft with deep ravines, with Scrape on the right, and straight in front, six miles beyond, the great broad crest of Dollar Law. Here we separated, my cousin riding forward, while I thought the road to the left would be the surer. Clear before us lay the Red Syke, an ugly gash into which the setting sun was beginning to east his beams.

And now I found myself in a most perilons position. The Weasel's feet were light and sensitive, and he stumbled among the stones and tall heather till I had sore work to keep my seat. My cousin's horse was of a heavier make, and I could see it galloping gallantly over the

broken ground. I cheered my steed with words and patted his neck, and kept a tight hand on the rein. Sometimes we slipped among the shingle, and sometimes stumbled over rocks halfhid in brackens. Then we passed into a surer place among short burned heather. The dry twigs gave forth a strange creaking sound as the horse's feet trod on them, and puffs of gray dust and ashes, the sign of the burning, rose at every step. Then beyond this we went to a long stretch of crisp mountain grass, pleasant for both horse and rider. We splashed through little tumbling burns, and waded through pools left by the spring rains. But of a sudden the ground grew softer, and even the Weasel's light weight could not pass in safety. At one time indeed I reined him back just on the brink of a treacherous well-eye, from which neither of us would have returned. I cast a glance at my cousin, who was still ahead; his heavy charger was floundering wearily, and he lashed it as if his life were at stake. Then we passed the green bog and came to a great peat-moss, full of hags where the shepherds had been casting peats. Here the riding was more difficult, for the holes whence the peats had come were often some five feet deep, and it was no easy matter to get a horse out of that treacherous black mud. The Weasel did gallantly, and only once did I dismount, when his hind-feet were too deeply sunk to permit him to leap. Beyond me I saw my cousin riding swiftly, for the middle of the moss as it chanced was the firmest and evenest place. We were now scarce a hundred yards from the ravine of the Red Syke, and even as I looked I saw him reach it, rest a second to give his horse breathing-space, and then turn on his homeward way.

I came to the place a minute after, and having compassion on my brave horse, I dismounted and eased him of my weight for a little. Then I got on his back again and set off. Gilbert I saw before me riding, as I thought, in the worst part, and with a fury that must tell sooner or later on his heavy steed. I had scarce been a moment in the saddle when, so strange are the ways of horses, the Weasel became aware for the first time of the other horse in front. Before it had been a toil for him, now it became a pleasure, a race which it lay with his honour to win. He

cocked up his wicked black ears, put down his head, and I felt the long legs gathering beneath me. I cried aloud with delight, for now I knew that no horse in Tweeddale could hope to match him when the mood was on him. He flew over the hags as if he had been in a paddock; he leaped among the hard parts of the green bog, from tussock to tussock, as skilfully as if he had known nothing but mosses all his days. We came up with Gilbert at the edge of the rough ground, lashing on his horse, with his face flushed and his teeth set. We passed him like the wind, and were galloping among the rocks and brackens while he was painfully picking his steps. A merciful providence must have watched over the Weasel's path that day, for never horse ran so recklessly. Among slippery boulders and cruel jagged rocks and treacherous shingle he ran like a hare. I grew exultant, laughed and patted his neck. The sun was setting behind us, and we rode in a broad patch of yellow light. In a trice we were on the brow of the Deid Wife. Down we went, slipping yards at a time, now doubling along the side; sometimes I was almost over the horse's head, sometimes all but off at the tail; there was never since the two daft lairds rode down Horsehope Craig such a madcap ride. I scarce know how I reached the foot in safety; but reach it I did, and rode merrily among the trees till I came to the green meadowlands about the house of Barns. Here I dismounted and waited for my cousin, for I did not care to have the serving-men laughing at him riding in

I waited a good half-hour before he appeared. A sorry sight he presented. His breeches and jerkin had more than one rent in them; his hat was gone; and his face was flushed almost crimson with effort. His horse had bleeding knees and her shoulders shook pitifully.

'Pardon me, Gilbert,' I said in a fit of repentance; 'it was a foolish thing in me to lead you such a senseless road. I might have known that your horse was too heavy for the work. It was no fault of yours that you did not come home before me. I trust that we may forget our quarrels and live in friendship as kinsmen should.'

'A truce to your friendship!' he cried in a mighty rage.

THE HOMELY TUBER.



OST of us probably derived our earliest information concerning the 'apple of the earth,' as it is called in some Continental languages, from some such book as The Child's Guide to Knowledge, where, among

other things, we learned that for a long time after its importation by Sir Francis Drake to-

wards the close of the sixteenth century, it was grown only by men of fortune, and in the time of Charles I. was a luxury provided for the queen's table at the price of two shillings a pound. How different from to-day, when at least half-amillion human beings in Ireland alone stand, with every failure of the potato-crop, in jeopardy of starvation! The potato became a staple crop in

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A good and cheap imitation of celluloid, which in its turn is a good and cheap imitation of ivory, is produced by boiling potatoes, after being peeled, for

Ireland in the sixteenth century, was a common field crop in England before the middle of the eighteenth century, but was twenty or thirty years later in establishing itself in Scotland, Germany, or France. In 1853 a monument to Sir Francis Drake was erected at Offenburg in Baden in token of gratitude for his having introduced potato-

culture into Europe. Mr W. P. O'Brien, in his book on The Great Famine (1896), gives an account of the years of distress and panic which followed such a calamity during the years 1845-47, throwing a dark shadow over the earlier years of the present reign, and taxing to the utmost the resources of the administrations of Sir Robert Peel and Lord John Russell. The fungus causing the potato-disease, so destructive and difficult to deal with, is known wherever the potato is cultivated, as well as in Chili where it is native; but it has been especially severe in Ireland, where the people came to trust to it too

exclusively. On the other hand, the potato has been one of the great agents in preventing famines in European countries. As an article of diet the potato is invaluable, its solid part consisting principally of starch to the amount of some twenty per cent., which is easily digested; though the potato, or any starchy food, is, taken by itself, very inferior in nutritiousness to wheat or oat meal. The other constituents are sugar, fat, nitrogenous matters, saline matters, and water to the amount of seventy-five per cent. Solanin, a poisonous alkaloid, is also found in the potato-plant, most in the potato-apples, least in the tubers; and boiling removes it. Potato-ash contains nearly sixty per cent. of potash, and nearly twenty of phosphoric acid; but the constituents vary a good deal in their proportions. The superstition of carrying a raw potato in the pocket as a cure for rheumatism may have its origin in the

fact of its containing potash. Starch is largely extracted from potatoes for use in textile factories and in the laundry. Farina or potato-starch is made into dextrine or British gum,

a substance of great commercial value. Among other of its numerous uses may be mentioned the preparation of certain varieties of brandy and whisky, distilled from fermented potatoes. In Russia syrup and sugar are prepared from potato-starch. In Germany much potato meal or flour is made, and is used for provisioning ships, barracks, &c.

In some parts of America potatoes are said to be so numerous that they have been used as fuel, being cheaper than coal. A few slices of the peel placed in tobacco that has become unpleasantly dry to smoke soon restores to it its lost moisture without imparting any unpleasant flavour. The potato is akin to tobacco; and tolerable cigarettes may be made from potato-leaves.

sulphuric acid, ridding the resulting pasty mass of its moisture by pressure, and afterwards moulding it into the required form-combs, knife-handles, pianoforte-keys, pipes difficult to distinguish from meerschaum, &c. The substance can also be dyed and turned in a lathe and applied to any of the purposes for which real ivory, now becoming scarcer every year, is usually employed, such as billiardballs and various fancy articles. Some kinds of hardened potato-pulp are now extensively used in the manufacture of buttons. But a couple of generations back snuff was in high favour, and boxes were largely made. A common material for them was potato-pulp, which, after being mixed with some sticky substance, moulded, dried, and varnished, had all the appearance of superior papier-maché. As a penwiper and rack combined, a potato is said to be an excellent preservative against rust and mildew.

several hours in water containing eight per cent. of

A curious dish, 'potatoes and point,' was said to be only too common amongst the poverty-stricken inhabitants of Western Ireland, who used, according to one explanatory legend, to place a salt herring in the centre of the table and point their 'praties' at it in order to get the flavour; according to another authority, salt, in the days when there was a heavy duty upon it, took the place of the salt fish. The dish is mentioned in the Memoirs of Captain Rock, printed in 1824: 'When there is but a small portion of salt left, the potato, instead of being dipped into it by the guests, is merely, as a sort of indulgence to the fancy, pointed at it.' R. Anderson, in one of his Cumberland ballads,

Dinnerless gang as hawf o' the week; If we get a bit meat on a Sunday, She cuts me nae mair than would physic a sneype, Then we've 'tatey and point every Monday.

The following poem by the Rev. J. T. Pettee, 'Prayer and Potatoes,' said to have formed part of a charity-sermon in Massachusetts some five-andtwenty years ago, portrays a poor old woman, whose sole subsistence had been potatoes for many weeks past, as seated in an armchair bemoaning the failure of her store and racking her weary brain as to whence she is to obtain more. Suddenly she thinks of the deacon over the way, and sends for

The deacon came over as fast as he could, Rejoiced at a chance of doing her good, But never once thought of potatoes. 'Now, tell me,' said he, 'the chief want of your soul?" And she, good woman, expecting a dole, Immediately said, 'Potatoes.'

He prayed for wisdom, and truth, and grace: Lord, send her light from Thy holy place! She murmured, 'Oh, send potatoes!' And still, at the close of each prayer he said, He heard, or fancied he heard, instead This strange request for potatoes.

'THE FATAL SHOT' AT TRAFALGAR.

By ARTHUR M. HORWOOD, Author of In the Shadow of the Sphinx, &c.



LAMB groaned, and restlessly rolled his head from side to side on his uneasy pillow. He was suffering from agonising toothache; and not being by any means a patient sufferer, he aggravated the

malady by his fevered tossing and turning about. At intervals he anathematised the unsound molar and threatened it with extraction on the morrow; meanwhile, he compressed his jaw with one hand, and, with the other, scratched the skin of his face sayagely as a counter-irritant.

It was quite a considerable time before he bethought himself of a common-sense palliative—a piece of cotton-wool steeped in brandy. He unsteadily floundered out of his truckle-bed, stepped gingerly across the tile flooring in the dark, and after upsetting one or two articles of furniture found a piece of wadding in his wardrobe, and then with a chink extricated a bottle from the cupboard. Of course the natural thing was next, in saturating the wool, to spill some of the spirit on his bare toes; whereat he gave utterance to a fretful cry through his compressed lips, then he savagely rams the wool into his decayed tooth and climbs back into bed.

Even then he experienced no relief; on the contrary, his distress rather increased: his mouth overflowed with saliva, and he worked himself up into a perfect frenzy. Again he bounded out of bed, ejected the wadding most emphatically, and proceeded to hurriedly drag on his clothes with a view to taking a nocturnal ramble. Toothache, he remembered, will sometimes yield to bodily exercise. He dressed himself fully, and, before quitting his room, placed a loaded pistol in his coat pocket; for Cadiz in 1805 was not so safe a place for nocturnal rambles as it is at the present day. Then he groped his way down a flight of marble stairs, fumbled a good deal over bolts and bars, and let himself out into the dim, silent street.

Mr Lamb was well acquainted with the topography of the Andalusian city, having occupied a stool in a Spanish merchant's office for several years. He took his way up the Calle San Francisco and the Calle Bilbao, and then turned down the Calle Fernando. The sound of surf breaking on the shore now reached his ears, and presently he emerged upon the Muralla, or seawall, that commands a view of the magnificent bay. For some little time past the number of ships lying at anchor had been augmented by the French fleet under Admiral Villeneuve.

Mr Lamb's eyes were confronted this lovely, quiet autumn night with a chain of anchor lights that seemed to reach from the Punta de San Felipe to Puerto Real across the bay. Farther along faintly glimmered those of the Spanish war-

vessels, besides those of the merchant-ships that crept in and out in mortal terror of capture by those ubiquitous cruisers of His Britannic Majesty King George III. The Englishman paced along the sea-wall, occasionally stopping to idly count the number of lights, keeping his mouth tightly closed meanwhile. A few paces farther on he had to open it when gruffly challenged by a sentry, whose stone pagoda-shaped sentry-box cut a wedge out of the full rising moon, shining low down, huge and golden.

Mr Lamb was curtly admonished to leave the Muralla—the presence there of the public at one in the morning not being approved of in those troublous times, so he obediently retired, not caring which way he went, as he remarked to himself. Traversing one or two streets, he came out upon the Plaza de la Constitucion just as, with a sepulchral boom-boom, two o'clock was announced from the church tower of San Antonio, that lords it over the square. Then, from beyond its precincts, the quavering intonation of a sereno or night-watchman took up the refrain, Ave Maria purissima! las dos han dado y sereno.

The last long-drawn note floated away, and then the plaza relapsed into its former stillness. Mr Lamb paced around it to make its circuit before branching off down one of its outlets. Not a light shone from any of the tall houses; even the Casino had retired into darkness. The public oil-lamps at long intervals burned dim and yellow, rendered more so by contrast when the house-tops and the belfry of the church caught the first beams of the rising moon.

At first Mr Lamb thought he had entire possession of the square; but on traversing its fourth side he discovered he was mistaken by hearing a heavy snoring proceed from one of the stone benches before the church.

Upon a closer inspection a uniformed figure is disclosed lying at length. His hat has fallen off; his left arm pillows his head, showing a face deeply disfigured with a scar, whilst the right is stretched out at full length as though pointing at Mr Lamb. The Englishman examines the figure intently-why, he could hardly have said-and mentally decides he is a marine belonging to the French fleet. And, as if for confirmation, the snores are broken, and the husky voice of a drunken sleeper articulates, 'Tiens, le voilà, Lord Nelson!' The trigger-finger of his outstretched right hand closes convulsively as though discharging a musket, and his mouth opens and shuts, the corner drooped as if biting a cartridge. The square has grown so light, as the moon peeps over the row of houses to the east, that Mr Lamb can plainly distinguish the frown that creases the man's heavy brow, the twitch of his The

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nostrils, and the very contraction of his left closed eyelid in simulating the action of biting. The buttons of his uniform eatch the rays of the moon and glow like fire-flies, his gaitered legs and deep cuffs stand out like snow against the darker portions of his dress.

In contemplating this sworn enemy of his country, Mr Lamb, standing in the deep shadow of an ornamental column, has forgotten all about his toothache and falls to speculating upon the fate that may be in store for this weather-worn marine. 'He'll be fighting soon—directly the fleets sail out—perhaps in a couple of days' time—poor beggar—I wonder if he'll be killed! I ought to hate him—one of my country's enemies

—perhaps I ought to be fighting him instead of peaceably regarding him and listening to his snoring and drunken muttering. My goodness, how he

does snore! . . . Why, good'-

Mr Lamb is not alone in contemplating the sleeper. A dark figure in a ragged cloak has suddenly appeared bending over the marine—so suddenly that Mr Lamb thinks it must have sprung out of the ground. He can see no face—nothing but the cloak—and a hand—and a murderous knife ...

Mr Lamb utters a cry and starts forward out of the shadow—and the figure has vanished! as suddenly and mysteriously as it appeared; and the Englishman finds himself standing, the saviour of his country's enemy, in the broad moonlight, his heart in his mouth and his pistol in his hand, at half-past two in the morning, in the Plaza de la Constitucion.

'Ave Maria purissima,' wails the sereno at the corner of the principal street, 'las dos y media han dado y sereno.'

Mr Lamb wipes the perspiration from his brow and reflects what he had better do. If he leaves the man asleep, the assassin (some savage Spaniard who does not love his country's present allies and quondam merciless conquerors) will return. He endeavours therefore to awaken the French marine, but without avail; his sodden slumber is not so easily broken. In desperation Mr Lamb rushes up to the sereno who has just called the hour, and backing his request by the production of a dollar prevails on the old functionary to come and stand guard over the man until dawn.

As the Englishman finally turns away and bends his steps homewards the marine is still snoring, and the sereno has placed his lantern and pike on the bench and proceeded to give utterance to his first melancholy cry at his new post.

It is three o'clock, and Mr Lamb returns to his bed free from toothache and sleeps the sleep of the

just—and the merciful.

A few days later the combined French and Spanish fleets sailed out of Cadiz, and on the 21st October, as Mr Lamb was passing along the Muralla soon after midday, he paused and listened intently, straining his eyes seawards. The horizon

was sailless, except for one or two feluceas gliding in under the influence of the light westerly breeze; but that mild breeze brought to Mr Lamb's ears the earliest intimation of an event that was to leave an imperishable mark on history—a faint, sustained, dull rumble, as of thunder, far, far away seawards.

'Olá, Señor Lamb, that was thunder, was it not?' exclaimed in Spanish a musical voice at his side, and the Englishman, withdrawing his gaze from the horizon, salutes a young lady in a mantilla, escorted by an elderly Don with a curled, white Vandyke beard and an elaborately-tasselled malacca cane.

Mr Lamb does not respond to the young Andalusian's remark without apparent effort.

'It may be thunder, Senorita Carmen, but—but' (swallowing nervously)—'I think it is the sound of cannon!'

'Caramba!' broke in the young lady's father. 'A naval engagement.'

'I-I feel almost sure. Listen!'

The three bent their heads and listened with bated breath.

Without a break, though rising and falling on the salt breeze, came the sinister murmur.

'There can be no doubt about it,' cried Mr Lamb after a minute, his face flushed, and speaking quickly. 'The combined fleets of Spain and France are being engaged in battle by my countrymen—by Lord Nelson. . . .

'Do you know,' he continued with a forced laugh, 'I feel I myself ought to be out there, instead of standing in safety on Spanish ground.'

'And yet,' rejoined Carmen maliciously, 'you told me yesterday you had saved a French marine's—an enemy's—life in the Plaza de la Constitucion the other night.'

'Yes, yes; quite so,' returned Mr Lamb rather pompously. 'No Englishman could have done otherwise. I don't repent of my act.'

'And yet, perhaps at this hour, he may be the means of doing much damage—sink a ship even,' joined in the Don, with a grim smile.

'Even then,' retorted the Briton manfully, 'I should simply have done the proper thing. It was common Christianity. The war, after all, is not of my making.' . . . He paused, looked at his watch, whose hands pointed to one o'clock, inclined his ear seawards—still the same distant rumbling murmur; still the same suggestion of a storm that neither approached nor receded; still the same sunshine and soft westerly breeze. 'Nevertheless,' he exclaimed with sudden animation, 'I should very much like to see what that fellow is doing at the present moment.'

Had Mr Lamb's wish been gratified, he would have witnessed the terrible battle of Trafalgar at its height, and in the thick of the fight the Victory silencing the guns of the Redoubtable, whose only retort is a spiteful crackling of musketry from the sharpshooters stationed in her

tops. Wreathed in smoke, the locality of these riflemen at times is only denoted by thin, bright tongues of fire that spurt downwards towards the deck of the British ship. Ever and anon the breeze fans aside the thick smoke, and groups of French marines and Tyrolese sharpshooters, their faces blackened with smoke and rigid and fierce with the spirit of battle, start into existence through the rifts, suspended high aloft, as though sailing on clouds, veritable angels of destruction, dealing death upon their enemies beneath them; and a closer inspection would have revealed the man whose life Mr Lamb had saved amongst a group of others in the mizentop, loading and firing with terrible rapidity and precision.

Amidst the roar of cannon the report of their small-arms is, except at intervals, inaudible even to themselves. When one and then another drops in a heap on the top, either wounded or killed, they are merely shoved aside or used as breastworks by the survivors, who sustain the fusilade to the utmost of their power.

Mr Lamb's marine is a crack shot, to judge by the savage glare of satisfaction with which he notes the effect of his every discharge.

Again he has brought down his bird.

Shot after shot he pours down with almost unerring aim.

A stronger puff than usual of the westerly breeze clearing away the intercepting smoke, he sees distinctly, as on a stage, a small, active, one-armed officer moving quickly across the deck of the *Victory*, his uniform bears stars, and he is an officer of consequence, pointing with his one arm to right and left as he rapidly gives his orders to those around him.

A horrible eagerness wrinkles the grimy face of the Frenchman; great beads of perspiration start out on his brow and furrow the black on his face. 'Tiens, le voilà, Lord Nelson!' he whispers frantically to himself, and he again levels his musket fires—the one-armed officer falls. . . . It is in truth Nelson.

It is now a quarter after one o'clock, and the minutes of the marine are numbered. He has become the target of the infuriated British. He knows he is doomed. The bullets rattle like hail around him; soon he and another are the sole living occupants of the top. He fires his last shot, which lays low an old quartermaster who is loading for a couple of midshipmen, and the next moment his own light goes out—a ball striking him in the head and another in the breast.

Vengeance has overtaken him—but, alas! the boasted, the idolised Nelson lies dying in the cockpit of the *Victory*.

When news of Nelson's death reached Cadiz, Mr Lamb became possessed of a strange and painful conviction (without more foundation than a dream he had had) that it was the man whose life he had saved who had perpetrated the deed. All his former complacency about having simply done his duty deserted him, and he became so depressed that his friends feared he would take his life. This quite probably would have been the case had not the sereno, who had stood guard over the Frenchman that night in the Plaza de la Constitucion come forward and solemnly declared that on that particular night, whilst his attention had been for a moment diverted, the assassin had again rushed forward and wounded the marine so seriously that he was sent on board his ship in a dying state.

Señorita Lola never mentioned to a soul that she it was who had bribed the sereno to give utterance to this well-intentioned fiction—not even to her husband. For Mr Lamb had become her husband in the following year.

A NORFOLK WILDFOWL DECOY.

By ERNEST R. SUFFLING, Author of The Land of the Broads.



UST as one associates Newcastle with coal, so does one's thoughts revert to the dumpling-county when decoys are spoken of. East Norfolk is peculiarly and favourably situated for receiving visits from the

great flocks of wildfowl which fly south when the cold weather sets in and during its continuance.

Observe how the whole county juts out into the North Sea, as if inviting the wing-weary and hungry flocks to rest and refresh before winging their way farther southward in search of a more congenial climate and a better prospect of adequate sustenance.

And it is not only the position, but the physical features of the county that present such irresis-

tible attractions for migratory birds. Flat stretchesof marshland, glittering and ample rivers, numerous and large 'broads,' as the lagoons are called, reed ronds, fen, and woodland are to be seen on every side; and then there are the lakes, many of them of considerable area, which form part of the estate surrounding the Hall, as the chief house in each parish is termed. With all thesecharms to please the eye of the feathered stranger, how can he possibly resist alighting in some wood-secluded pool, if only to rest his tired pinions and fill his empty crop? A hungry bird has his feelings like a human being; and when those feelings are of weariness and hunger, would he not be a stupid fellow if he passed over a land of plenty-a bird-paradise-without a halt?

Of course he would. So, be he duck or teal,

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widgeon or mallard, down he stoops into a pretty, reed-fringed, wood-surrounded bay forming part of a large broad or lake.

Other ducks are there before the new-comers, ducks which, in their plumpness, contentment, and confidence, appear to be peculiarly familiar with the locality. And to tell the truth they are familiar, for they are the tame decoy-ducks, with which the new-comers at once fraternise.

They look around the quiet expanse of water and find no cause for alarm. There are the great brown trunks of oak and elm trees, with their naked branches glittering in the early morning sun, for it has been a frosty night, and the hoar-frost bejewels everything it touches with its mystical breath. The brown, dry reeds nod and give forth their peculiar musical sighing, as their long, graceful stems rub against each other in the gentle breeze which is just strong enough to ruftle the surface of the water, which is here and there broken and beringed by the rise of a playful perch or the rush for escape of a roach as it flies from the saw-like jaws of the everhungry pike.

There, on the left, knee-deep in water, stands a heron taking his early breakfast of gudgeon and such small fry; and now and again the glint of a busy kingfisher is seen, now green, now brown, as he too steals his morning meal from the pellucid water. See, he seizes a little fish and flies with it to a tree-root which rises, gnarled and hydra-like, from the lake, and giving the head of the small fry a sharp tap on the rough bark, tosses it above his head and catches it deftly, head downward, in his bill, and swallows it without the least fear of the fins or gills catching his distended throat.

On shore the lark sings his blithest as he mounts heavenward, and the wood-pigeons utter their monotonous coo-oo! coo-oo! from the lofty forest trees. 'Here is peace in this place surely!' thinks the poor wanderer, as he trails his wake on the surface of the lake, and finally settles down to enjoy himself.

Alas, poor bird! Peace and death are so closely associated in this sylvan spot that the former is but the precursor for the latter, as the incautious duck soon finds out, but only when too late.

What is that great archway of bent saplings in the little nook over there? How sheltered and inviting it appears! The water at its entrance mirrors the arch and makes it a complete circle; and see, both tame and wild fowl are gradually nearing its entrance!

There is corn floating on the water near the entrance, which both tame and strange ducks at once appropriate; and there is a brown and white dog popping in and out among the reed-screens which border the decoy.

What is the dog doing? Why does he appear and disappear in such a mysterious manner? He just shows himself and then is gone again.

What is the animal about?

That is just what every bird in the strange flock wishes to discover. A dog has a wonderful fascination for wildfowl, and it is that very fascination which lures the poor birds to their doom.

The decoy-ducks (the tame ones) know that now is their time to be fed, and accordingly swim into the 'pipe,' followed by their new friends, who cannot keep their bright eyes off the dog which is acting so strangely. Up the 'pipe' they go, farther and farther, not noticing that as they advance the series of hoops gradually become smaller and smaller, and that the water up which they are swimming also becomes proportionately narrow, and curves round, so that the entrance is no longer visible.

With wonder they sail onward, quacking questions in their mother-tongue, which is probably varied with the brogue or patois of the various tribes to which the flock belongs. Who can tell if the teal can speak or understand the Pochard language or the widgeon converse in Mallardese?

Anyway, onward goes the doomed band, wondering what is at the end of the curious cave of bewilderment into which they have entered, when suddenly a horrid two-legged monster—the decoyman—appears behind them, and they scramble forward, half-flying, half-swimming, amid a tremendous splashing hubbub, right into the end of the net, where they cannot escape, a fact which the decoyman takes deliberate advantage of, by seizing his prey, one by one, and wringing their necks as he remarks to the dog which lies expectantly by him:

'Thet's a rare good "push" my bewty; yew shull hey a extry dose o' old horse for yar breakfast, that yew shull, for yew du du yar work right well —vew du!'

Before having a chat with the garrulous old decoyman let us examine a decoy.

First, we notice that the entrance-hoop is some fifteen or sixteen feet wide and about ten feet high, and very artfully placed, so that it is partially hidden by reeds and the overhanging branches of trees. From the entrance-hoop the 'pipe' runs back some sixty or seventy yards, gradually curving as it recedes from the entrance, so that its tail-end cannot be seen from the mouth. Gradually the hoops diminish in size until they are not more than a yard across, and the whole ends with a purse-net, which is the Ultima Thule of the frightened wildfowl. The netting used to cover the 'pipe' is ordinary galvanised wire-netting.

The dyke or channel beneath the hoops of course diminishes in the same ratio as the hoops themselves, gradually becoming narrower as the 'pipe' is ascended. The water in the dyke is usually not more than a couple of feet deep.

There we have the 'pipe' complete; but besides the 'pipe' are the all-important screens, made of reeds worked in the form of thin, flat

walls, and placed at right angles with the 'pipe,' so that the dog can work round them, and with peep-holes here and there through which the decoyman can see how things are progressing. The screens are about five and a half feet high and twelve feet long, and vary in number from ten to fourteen.

Having seen the construction of the decoy, let us now examine the method of working it.

As is generally known, wildfowl are very shy and delight in retired spots. The first care of the decoyman, therefore, is to make the neighbourhood of his decoy as secluded and quiet as possible, and to allow the wildfowl to settle uninterruptedly upon the decoy-water.

The love of concealment leads wildfowl to be partial to waters whose margins abound with underwood and aquatic plants; hence, if the spot is not already furnished with these, they must be provided; for it is not retirement alone, but a search for food, which leads them into the quiet

nooks.

Next to food, wildfowl love a grassy bank, where they may plume and arrange their feathers after a long flight, and on there being such a convenience near the mouth of a 'pipe' a great deal of the decoyman's success depends. It is a necessity, therefore, to have a nice, smooth, grassy slope on either side of the entrance to the 'pipe'such green lawns are, so to speak, the bait.

Having allured the fowl to the mouth of the 'pipe,' the difficulty is to entice them off the bank into the water without their taking wing, and to lead them successfully to the far end

of the decoy.

To get them off the grassy bank into the water, or, if in the water, to cause them to enter the 'pipe,' a dog tutored by the decoyman, shows himself from behind the foremost reed-screen. On seeing the dog the fowl will, if on the bank, immediately take to the water, where they feel more at home against the strange animal by the

Now, among the wildfowl, a number of tame ducks-decoy-ducks-have, from the alightment of the strangers, mixed fraternally with them, and they know that by swimming up the 'pipe' they are not only safe from the dog, but that food awaits them. The decoy-ducks, therefore, straightway swim up the 'pipe' to secure their usual food, and the wildfowl at once follow; the dog in the meantime popping in and out among the screens in a most mysterious manner, as the poor wanderers, following their deceitful civilised friends, swim unconsciously to their doom.

Presently the head of the 'pipe' is neared, and then for the first time the decoyman shows himself, or, hat in hand, waves an arm from behind a screen. This is the immediate signal for the whole body of fowl to take wing and dash up the 'pipe;' but, as the hoops are now narrow and low, their wings come into contact with the netting, and they fall again into the water; and, being afraid to turn back, the man being close behind them, push forward into the tail of the purse-net, and become the lawful prey of the decoyman. Pochard are seldom, if ever, caught in a decoy, as on being startled by the sudden appearance of the man they turn buck and fly in terror to the mouth of the 'pipe' and escape.

Let us indulge in a chat with this worthy. Strongly but loosely built, above the medium height, tawny-bearded, rugged of feature, wrinkled and gray-eyed, the decoyman is a picture of health, contentment, and good-humour. His gray eyes appear to scintillate as he speaks, lighting up his honest, weather-beaten countenance in a remarkably pleasing manner, a sure sign of rude health and a contented mind. He is, as most of the East Norfolk peasants are, a true descendant of the old vikings who plundered and settled here more than a thousand years ago. He needs no pedigree to trace his descent; his very name is a proof of his ancestry-Thirkettle. Many of the names on the east coast have an unmistakable Danish or Scandinavian ring about them-as Seago, Ulph, Hacon, Trorey, Kerrison, and a score others.

'Do you mind answering me a few questions, letting me into a few of your secrets, Thirkettle?'

'Not at all, maaster. I don't s'pose yew'll set up 'coying agin me,' is his reply, as his expansive mouth lengthens into an extensive grin.

'Well now, why do you have two "pipes" so close together, but running in different directions?'

'Well, maaster, yew must know it's the natur' of fowl to take wing head to wind, and it 'ont du to try and 'coy 'em up the "pipe" onless the wind blow pretty much down it; 'cos while the enemy is to leeward on 'em they forge ahead up the "pipe," makin' sure to be able to escape by using their wings, as is only natural. Sometimes they come up the "pipe" with the wind, but then when they get to the canopy-net they are scared, and turn round about, facin' the wind, and so escape, and then there's the ould 'un to pay; every fowl 'ithin hearen take off, and the game is up.

'How many do you average at a "push" for the whole season?

'Well, I don't know 'zactly what a average is; but sometimes I take half-a-dozen, and sometimes ten times as many; all depends on sarcumstances of weather and season. I have taken as many as five score at one "push," but that was years ago. I'm contented if I get a score, and pleased if I wring two score; but thet ain't so often as I should

'May I ask what price the birds fetch?'

'Why, sartainly. Sometimes on the first day I'll get as much as seven-and-six for a brace of birds and even half-a-sovereign, but that soon come down to four or five shullins; and when Th lavi

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fowl are plentiful the price come down tu even three shullins or three-and-six a brace.'

'How many go to a dozen?' I ask.

'Oh, we don't give none in; twelve's a dozen, to be sure. Du yew think we gan em one in like the baakers with their loaves?'

'No, my friend; but'—fumbling in my pocketbook—'here is an extract from a book written just over a century since. I will read it:

"Fowl and fish are very plentiful in the Broads, the pike and cels being very large. The duck, mallard, and teal are in such plenty as is scarcely to be conceived. They are taken in prodigious flocks at a time in the decoys. They send these fowl to London twice a week, on horseback, from Michaelmas to Ladyday, and one decoy will furnish twenty dozen or more twice a week for the whole season. Two teal are reckoned equal to one duck, and five duck and twelve teal are accounted a dozen. The usual market-price is about nine shillings for such a dozen."

'There, what do you say to that, Thirkettle?'

'Well, yew see, them wor better times. More fowl and less folks about to fright 'em. Now, last season was a werry fair one, and in the six months I took, big and little, over twelve hundred fowl; and when yew come to set them down, say at two shullins apiece, that ain't so bad for a winter's work.'

'What breed of dog do you think most adapted to this work?'

'Well, some use one kind and some another. I know some think nothin' beat a rough-haired terrier, and sartinly they are good dogs, and I've know'd some capital mongrels what du their work right well and clever; but as you see I am training this young spaniel to the business, though I find it a little difficult to keep him away from the water; it's his natur' to go in. He's a nice-coloured dog, you see, and it's my firm belief that the prettier colour you get a dog the better it is for 'coying: get 'im red if you kin, like an old fox, and he'll attract more than your sad-coloured go-to-the-buryin' black 'un.'

'Have you any idea of the number of decoys in existence?' I ask as a last question.

'No, maaster, yew've done me there, for I've never bin twenty mile from home in my life; and, as I ain't no scholard, I don't read a sight. Still I'd just like to hear that question of yourn answered.'

'And so you shall, my friend, for here in my pocket-book I have made a few notes. All told, there are only about forty now in existence; but at the beginning of this century there were about one hundred and forty, distributed thus: In Lincolnshire, thirty-nine; Essex, twenty-nine; Norfolk, twenty-six; Yorkshire, fifteen; and Somersetshire, fourteen. These, with one or two in some other counties, make the total.

'You look in splendid health, my friend; but do you not have a rough time of it in the very sharp

'Ah, love me, I du thet. Why, when it's freezin' hard I have to get into thet old tarry punt, and keep a-pullin' about half the night to pervent the ice a-formin' on the water. Fowl like open water, and I ha' to du my best to keep it open; and it ain't no lie I tell yew when I say I've had my eyelashes and beard all frozen as stiff as if they wor cut outer stone. It ain't all fun, maaster, this yer game; and yew dussent light a bit o' bacey in yer pipe, nor make no noise, or clash about to keep yer feet warm; and sometimes I've had mine so numb at the ankle jints that I've been a'most afraid to walk, for fear they'd break off at the ankles; I've felt as if I could kick 'em off at the jints just like a luse pair o' butes.'

Bidding farewell to the talkative decoyman, I retrace my steps through the wood, pleased with the garrulity of the man, and pondering over the lot of the happy, solitary fellow, who, when at work, must make no sound nor give utterance to a word even to his dog, and cannot smoke, nor scarcely move, for fear of spoiling his entire vigil. The good fellow's lot reminds me of the lines written by Cowper upon Robinson Crusoe's prototype, Alexander Selkirk.

Oh, Solitude, where are the charms
Which sages have seen in thy face?
Better dwell in the midst of alarms,
Than reign in this desolate place.

And as I ponder I do not envy the decoyman his solitary, frigid lot.

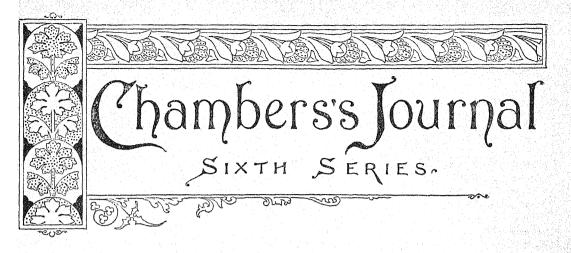
WITHOUT WORDS.

We met and we felt there was something between us;
We met for the first time one night at a ball;
We met, and it seemed that the past time had seen us
Companions in something held secret from all.
I bowed and you smiled, and our eyes interchanging
A look, as if only we waited the chance
To say what we met for; we joined the arranging
Of partners in rows for an old country dance.

Next morning we moved from the covert together—
The hounds giving tongue and the fox gone away;
And through our grand gallop across the clean heather
My tongue was uneasy with something to say.
And though I was silent I felt that the longer
We rode so together the nearer it came,
As though in my being a spark smouldered stronger,
Awaiting the impulse to break into flame.

Returning at evening when farm-lads were calling
Their field-weary cattle to stable and byre,
We rode past the covert as twilight was falling
Dew-laden with silver on sapling and brier;
When suddenly something, a look or a sigh, love,
Disturbed the fine balance between me and you,
And lo! without time for a word or reply, love,
Our hearts ran together like wind-shaken dew.

WM. WOODWARD.



ON LEISURE, GENIUS, BOOKS, AND READING.

By Augustine Birrell, Author of Obiter Dieta, &c.



HE word 'scholar' comes to us from a Greek word which means leisure. It is a significant derivation. A scholarly life is a leisurely life. It may be a life of unceasing toil for all that, and of excruciating self-

denial. Browning's 'Grammarian' had a tough time of it 'settling Hoti's business' and giving us the doctrine of the enclitic de. But he was not working down a mine or in a factory, nor was he arguing cases at the Bar or superintending a hospital in a crowded city. No-he was sitting alone in some dim corner, grinding at grammar. We no doubt read stories of great scholars who were manufactured as Sir Arthur Helps wrote essays—'in the intervals of business;' but wonderful examples as these gentlemen may be of industry and devotion, as a rule their scholarship is no great shakes. To become a Scaliger, a Casaubon, a Selden, a Milton, a Gray, a Bentley, a Gibbon, an Acton, or a Jebb, you must have leisure to grow learned.

Busy men, poor men with wives and families, plain men with no great gifts of acquisition or taste for study, vain men who have no fancy to become blear-eyed, ambitious men who want to ride upon the nation's neck for a brief season, must all forswear scholarship; and if they are honest men will make no pretensions to it. To be a scholar you must have σχολή.

But let us pluck up heart. To forswear scholarship is not to bid farewell to the delights of literature; for literature is the reflection in words of the great pageant of life, a mimic representation or reproduction in language of the movement and the mystery, the fleeting charms, the recurrent emotions, the gaiety and the melancholy of men's days upon earth. One does not need to be a scholar to appreciate these. Open eyes, quick wits, and a lively fancy are man's best endowments. This is the meaning of the old saying, 'An ounce of mother-wit is worth a

pound of clergy.' Shakespeare once held in his firm hands a copy of North's translation of Plutarch's Lives, 1579, a sturdy folio still to be found in the old book shops. There he read as any one else might have done, how Antony, 'when Cæsar's body was brought to the place where it should be buried, made a funeral oration in commendation of Casar, according to the ancient customs of praising noble men at their funerals. When he saw that the people were very glad, and desirous also to hear Cæsar spoken of and his praises uttered, he mingled his oration with lamentable words, and by amplifying of matters did greatly move their hearts and affections unto pity and compassion. In fine, to conclude his oration, he unfolded before the whole assembly the bloody garments of the dead, thrust through in many places with their swords, and called the malefactors cruel and cursed murtherers. With these words he put the people into such a fury. that they presently took Casar's body and burnt it in the market-place with such tables and forms as they could get together.'

Shakespeare turned this over in something we call his mind, and the outcome was the most marvellous speech ever put by poet in the mouth. of man. Yet Shakespeare could not have read Plutarch in the original, nor is there any evidence Sir Thomas North could, since he was content to translate Plutarch from the French version. But however that may be, 'twas he set Shakespeare's imagination at work, and therefore he deserves our homage. Our worship we reserve for genius.

Do not quarrel with my use of the word worship in connection with genius. The genius I worship is a sublimated essence, something quite apart from 'the poor inhabitant below' inwhom it was once incarcerated. I do not worship Burns any more than I admire the style of his letters to Clarinda or his behaviour to Mrs Burns; but the genius of Burns-that mysterious 'some-

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thing, which has put him on the pinnacle where he must ever remain a nation's joy and pride—is one of the most moving, melting things in our lives, as it is one of the richest possessions of our race. So, too, the genius of Carlyle. Leave the tea-tables to chatter of his fits of spleen and dullards to deplore his humorous extravagances; those of us who hunger after writers who stir the fancy, who set the boulders rolling upreariously down the hills, who throw great splashing stones into the dreary pools of our sluggish imaginations, still hug the genius of Carlyle, and decline to drag The French Revolution into a court of matrimonial causes. It may well be that in the case of Carlyle future ages will not follow our example. Like his great protagonist Newman, Carlyle flung himself so completely into the hurrying currents of his day as to endanger his chance of what is called immortality. But so far as I am concerned I wash my hands of posterity.

When you come to think of it, the two great possessions of a nation are its memories of great actions and the genius of its authors.

To enjoy the latter requires only a moderate amount of $\sigma \chi o \lambda \dot{\eta}$, or leisure. Some leisure is necessary; but enforced work, if not too severe, sharpens the literary as well as the bodily appetite. Years in a Library is not so good a title as Hours in a Library.

But two things are necessary: before reading you must learn to read; and, having learned to read, you must be fond of reading. Now, a vast number of people do not care a rap about reading. They may pretend to, but they do not. They say they cannot find time; it is the merest subterfuge. They could easily find time if they chose, but they prefer doing so many other things first. There is no great harm in this; there are other pastimes besides reading. Some people (not many) read a great deal too much, and would be all the better for doing a little observing. Mr Bagehot said of Shakespeare that if he walked down a street he knew what was in it. One of the wisest men I have ever known could neither read nor write. Still it remains true that unless you are fond of reading you will not read, and yet unless you read you cannot truly appreciate the work of genius.

Nor can you do this unless you have learned

to read. This is by no means so easy as it sounds. There is only one way of reading so as to get pleasure from it, and that is to be able to read without knowing what you are doing. A man or woman who comes home tired after a day's work will either read this way or not at all. It is no use if you have to spell your way and stumble along the printed page like a hobbled pony. If that is your plight you will prefer a game of draughts or dominoes; and who could blame you?

I am sorry to say I have met boys in England, who have got all sorts of prizes in Board and other state-paid schools, who cannot read after the only fashion that makes reading of the least use. No wonder these boys soon forget all they ever knew. No wonder by the time they are twenty they have to go to evening classes to be taught over again by charity what they were once supposed to be taught by rates and taxesnamely, how to read. I once said, and I now repeat, 'Our whole educational system is not worth one of the pounds it costs-and it costs millions of pounds-unless it teaches a child to read English in the way that Macaulay said he could read Greek, that is, with his feet on the fender. I notice with horror a growing impatience with what is called "mere reading, mere writing, mere ciphering." Mere reading, indeed! Mere geometry, mere physical geography, mere Latin, mere Greek, mere anything you like to think of, except reading, which is the very soul and citadel of learning.'

Having learned to read, and being fond o reading, you have entered into your inheritance-It lies before you. Read what you like best; do not be ashamed of your tastes, or be deceived by novelty. If you are fond of fiction, give the best the first chance. Read for example Guy Mannering and Hugo's Les Misérables. If, having done so, you deliberately prefer East Lynne, it cannot be helped. Mrs Wood was a voluminous author; and, after all, books were intended to be read. But nobody who is really fond of reading needs to be told what to read. Lists of books are made for the people who do not care about rest ing, and are a little uneasy because of their inc ference. They buy Sir John Lubbock's 'Hund; Best Books,' chatter about them for a brief wither and then resume the even tenor of their bookle



JOHN BURNET OF BARNS.

CHAPTER VI.-HOW MASTER GILBERT BURNET PLAYED A GAME AND WAS CHECKMATED.



HAT night I was too wearied and sore in body to sleep. My mind also was troubled, for I had made an enemy of my cousin, who as I knew was not of a nature to forgive readily. His words about

Marjory had put me into a ferment of anxiety. Here was my love, bound to me by no promise, at the mercy of all the gallants of the countryside. Who was I to call myself her lover, when as yet no word of love had passed between us? Yet in my inmost heart I knew that I might get the promise any day I chose. Then thoughts of my cousin came to trouble me. I feared him no more than a fly in matters betwixt man and man; but might not he take it into his head to make love to the mistress of Dawyck ?-and all maids dearly loved a dashing cavalier. At length, after much stormy indecision, I made up my mind. I would ride to Dawyck next morn and get my lady's word, and so forestall Gilbert or any other.

I woke about six o'clock; and looking out from the narrow window-for Barns had been built three hundred years before-I saw that the sky was cloudless and blue, and the morning as clear as could be seen in spring. I hastily dressed; and getting some slight breakfast from Jean Morran, and saddling Maisie, who was now as active as ever, I rode out among the trees. I feared to come to Dawyck too early, so I forded Tweed below the island, and took the road up the farther bank by Lyne and Stobo. All the world was bright; an early lark sang high in the heaven; merles and thrushes were making fine music among the low trees by the river. The haze was lifting off the great Manor Water hills; the Red Swire, the scene of the last night's escapade, looked very distant in the morning light; and far beyond all, Dollar Law and the high hills about Manorhead were flushed with sunlight on their broad foreheads. A great gladness rose in me when I looked at the hills, for they were the hills of my own country; I knew every glen and corrie, every water and little burn. Before me the Lyne Water hills were green as grass, with no patch of heather; and to the left the mighty form of Scrape, half-clothed in forest, lay quiet and sunlit. I know of no fairer sight on earth; and this I say after having travelled in other countries and seen something of their wonders; for to my mind there is a grace, a wild loveliness in Tweedside, like a flower-garden on the edge of a moorland, which is wholly its own.

I crossed Lyne Water by the new bridge, just finished in the year before, and entered the wood of Dawyck; for this great forest stretches on

both sides of Tweed, though it is greater on the side on which stands the house. In the place where I role it was thinner, and the trees smaller, and indeed around the little village of Stobo there lies an open part of some fields' width. At the little inn there I had a morning's draught of ale, for I was somewhat cold with riding in the spring air. Then I forded Tweed at a place called the Cow Ford, and riding through a wide avenue of lime-trees came in sight of the gray towers of Dawyck.

I kept well round to the back, for I did not care that the serving-folk should see me and spread tales over all the countryside. I knew that Marjory's window looked sharp down on a patch of green lawn bordered by lime-trees, so I rode into the shadow and dismounted. I whistled thrice in a way which I had, and which Marjory had learned to know long before when we were children, and I used to come and beguile her out for long trampings among the hills. To-day it had no effect, for the singing of birds drowned my notes, so I had nothing left but to throw bits of bark against her window. This rude expedient met with more success than it deserved, for in a minute I saw her face behind the glass. She smiled gladly when she saw me, and disappeared only to appear again in the little door beside the lilacs. She had no hat, so her bright hair hung loose over her neck, and was blown about by the morning winds. Her cheeks were pink and white, like apple-blossom, and her lithe form was clad in a dress of blue velvet, plainly adorned as for a country maiden. A spray of lilae was in her breast, and she carried a bunch of sweet-smelling stuff in her hands.

She came gladly towards me, her eyes dancing with pleasure. 'How soon you have returned! And how brave you look!' said she, with many more pretty and undeserved compliments.

'Ay, Marjory,' I answered, 'I have come back to Tweeddale, for I have had enough of Glasgow College and books, and I was wearying for the hills and Tweed, and a sight of your face. There are no maidens who come near to you, with all their finery. You are as fair as the spring lilies in the garden at Barns.'

'Oh John,' she laughed, 'where did you learn to pay fine compliments? You will soon be as expert at the trade as any of them. I met a man yesterday in the woods who spoke like you, though with a more practised air; but I baile him keep his fine words for his fine ladies, for they suited ill with the hills and a plain country maid.'

At this I must suppose that my brows grew dark, for she went on laughingly:

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PHEASANT-FARMING.



HEASANT-FARMING is one of the many industries which owes its existence to the perfection of breechloading firearms. In the old days the sportsman with his muzzleloader and the 'one good old pointer

or setter,' so earnestly recommended by that famous old sportsman, Colonel Hawker, found in a decently well-preserved covert quite as many birds as he could kill, and nobody thought of replenishing his woods by artificial means. But when the shooter with improved weapons became enabled to discharge ten shots in the time previously required to load and fire two, he demanded a proportionate increase in the head of game. For many years owners of large coverts depended on their gamekeepers to rear the required addition to the natural pheasant population; but the craze for big bags developed, and fashion set a standard of magnitude Nature, nided by hand-rearing on the spot, could not satisfy. It was impossible to raise on the ground the enormous head of game which can be killed in a couple of days by half-a-dozen men, each equipped with three guns and two men to load them. The very essence of the modern battue is that pheasants shall 'come over' as rapidly as gans can be changed and triggers pulled; and the pheasant-farmer arose to supply the deficiency.

A great many men make a practice of rearing pheasants on a small scale; but the number of concerns in England entitled to be called 'farms' may be counted on the fingers of one hand. The number is not likely to increase: the market for pheasants and their eggs is comparatively limited; and though the prices obtained appear heavy, they are hardly commensurate with the large outlay necessary, and the expenses, troubles, and risks involved. The first essential to successful pheasant-rearing is space and plenty of it. Poultry-farming on an extensive scale has, as we all know, invariably proved a total failure; large numbers of fowls kept long on the same ground 'stale' it in some mysterious fashion, and, contracting a disease of tuberculous character, die with punctuality and expedition. The domestic fowl does not command a price high enough to enable the farmer to provide the acreage necessary to carry a large number of birds, which require frequent change of soil while the staled areas are allowed to rest; hence the impossibility of making a poultry-farm pay. Pheasants produce exactly the same effect on land, and are perhaps even more liable to disease; but pheasants and their eggs bring prices so much higher than those procurable for domestic fowls that the farmer can afford to give them the necessary space for change of soil.

One of the most successful concerns of the kind is that some half-dozen miles from Petersfield, on

the Hampshire Downs. Seen from a little distance. the swelling hillside appears to be covered with large melon-frames set out in orderly array. These are the pens, of galvanised iron and wire netting, which play an important part in the business. Pheasant - farms are not all alike in general aspect, as the systems pursued seek to achieve the same end by different means. There is, for an instance, a farm at Berkhampstead which resembles a cattle-market more than anything else, with its ranges and blocks of substantially-fenced paddocks; and another in Wales which looks more like a poultry-yard on a large scale. However, as we have begun with the Petersfield farm, where they produce an average of ninety-five chicks from every hundred eggs, we may go on with it, feeling that we are at all events considering a successful system.

Perhaps the first thing the stranger asks himself is, 'Where are the coverts?' the ordinary mind associating hazel coppice or rhododendron plantations with pheasants as naturally as heather with grouse. There are none on the Downs, whose long curves of coarse grass are unbroken save by scanty hedges and by thin lines of hop-poles, which nearer inspection shows to be the supports of wirenet fencing six feet high. The whole farm, some four hundred acres, is thus divided into large enclosures of from twenty to fifty acres each. We will, if you please, look more closely into some of these.

The long herbage, sapped dry by summer heat, rustles under foot as we climb the hill. There is little to be seen save a long line of black coops which erstwhile contained foster - mothers now released; but all round is the whispering murmur caused by well-grown pheasant chicks brushing through the herbage, a sound that recalls the sleepy wash of afternoon tide on shingle. The birds when first hatched are tame as farmyard poultry; but the instinct that is in them develops surely as their plumage, and ere they can fly the birds which once crowded on the shorn runs to meet the feeder are shy as any brood reared in covert by their own mother. Now and again your eye may be caught by a chick crouching close, with outstretched neck, in vain endeavour to escape notice by statuesque stillness. Under the hedge which crosses the first enclosure stands the gallows-an awful warning to poachers furred and feathered, with its ragged row of sun-dried carcasses-stoats, rats, crows, jays, magpies, and a sparrowhawk or two - incorrigible criminals on a pheasant-farm all of them, who may look for no quarter. The sparrowhawk and the crow do most of the execution among the chicks; the other bad characters perhaps create more havoc among the eggs. Even now, a kestrel is poised motionless over yonder, with an eye, it is feared, tounlawful game; this lovely little hawk as a rule is content with such small deer as rats, field-mice, and cockchafers, and thus renders service to the pheasant-farmer. He is, unfortunately for himself, prone to contract a taste for young game, when his fate is surely a place on the gallows with other criminals. A magpie flickers, black and white, from the grass and vanishes over the hedge. A bad lot is the magpie, and deserves the doom that awaits him in the farmer's gun.

Now, we are among the pens in which sundry full-fledged cocks are confined awaiting 'transportation for life' which will probably be short, as they, a round thousand, are booked for early despatch to a magnate in the Midlands, who wants a ready-made head of game in the coverts which a certain great personage has kindly promised to come and shoot. If you have yet any illusions concerning the tameness of hand-reared pheasants, a walk through these rows of pens should correct them. Though we move without unnecessary gestures, and our guide never ceases whistling the seductive whistle the birds ought to recognise as the feeder's call, the rattle and clatter of skulls against wire is incessant; as at our approach the birds spring up against the low wirenetting in frantic endeavour to take wing, you might imagine them freshly caught and caged, instead of birds which have never known liberty in the proper sense of the word. Violent as the rattling is, the birds seem to do their heads no harm; the loss of a few feathers is the worst, and -we must suppose-a headache. Now and again may be seen a bird which has practically scalped itself, but this is rare.

Low down on the hillside, facing the south-west, we enter what may be called the nursery. Here, instead of the large roomy pens hitherto seen, we have solid blocks of small ones, six feet long by two wide, each with a box at one end; in these hatching operations are carried on. Stay: having come so near the beginning we had best make a fresh start and trace the business from the commencement of the busy season. In the early spring, then, the birds which have passed the winter penned in batches of ten or fifteen are divided into family groups of six-five hens and one cock-and redistributed in the layingruns. All the hen pheasant has to do is to lay eggs industriously; she is not required to hatch them, is not given the chance indeed, for the men remove the eggs twice a day during the season. Thus, released from maternal responsibilities, the hen pheasant grows reckless and improvident. In her natural state she is content with a nest whose makeshiftiness and general untidiness would draw tears from the eyes even of a rook; absence of materials for making a nest excuses her omission to attempt in the pen the hap-hazard collection of leaves she regards as good enough to hatch eggs in, but does not extenuate the curious recklessness with which she deposits them anywhere in the run. In the wild state, moreover, the hen pheasant, mindful perhaps of family cares, will lay only from nine to eighteen eggs; the penned bird thinks nothing of laying from thirty-five to forty, to the gratification of the farmer, who can sell them at £5 per hundred in the early season, and for about half that sum in July. The anxiety of covert owners to stock their shootings with birds that shall be well-developed and strong on the wing by October explains the difference between the prices obtainable for early eggs and late. The hens begin to lay about the middle of April, and continue to do so for about three months, though some very late eggs are found in August and even in early September. The eggs being removed as laid, the birds do not become 'broody' and cease laying while their reproductive power is still unexhausted. Whether this system will induce any tangible change in the physiological condition of the pheasant it is not yet possible to say; but in a general way we may take it for granted that keeping the birds in an unnatural state can hardly fail to produce some results. On some farms the laying birds are kept in large paddocks, one wing being clipped to prevent flight. It is not obvious what advantage one system possesses over the other, save that the eggs are more easily collected from the small pens and that without risk from careless feet. No doubt the farmer who approves the paddock principle could prove to your—or his own—complete satisfaction that the penning system was absolutely wrong. Such debatable questions as these, however, we may leave to experts.

By far the larger proportion of eggs is sold to owners of shootings whose keepers hatch and rear the young birds on the spot. Pheasants are home-staying creatures; when undisturbed they seldom leave the wood in or near which they were hatched, and when frightened away by the passage of hounds drawing for a fox, or even by a shooting-party, they probably return before dark to the copse or spinney whence they were driven. Hence the buyer is tolerably sure to get his own birds.

To revert to the business in hand, packing the eggs is an important phase of the industry in view of the fact that small hampers containing twenty or twenty-five eggs are sent by rail to all parts of the kingdom. This work is performed by the keepers' wives, who are paid so much per thousand eggs; each packer is supplied with cards bearing a distinguishing number, and one of these she slips into each basket before sewing down the lid. The same system is in vogue at biscuit-factories and works where fragile goods are packed by hand in large quantities, to enable complaints of careless packing to be traced to the offender. From Petersfield they send away about 200,000 eggs every season, and complaints

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of breakage are rare; egg-packing, in fact, is one of the minor sciences, and has been brought to something like perfection. This number does not represent the total actually laid; a proportion is retained for stock, though the necessity for introducing 'fresh blood' annually entails procuring eggs by exchange or purchase from distant shootings or farms. The temptation to sell all the early eggs and depend on late layings for stock must be great when the difference in price is considered; but the farmer is obliged to resist it in order that he may be able to fulfil chance orders for birds, like that mentioned above for one thousand cocks, which keeps a whole field of pens occupied with distracted birds. Cocks only are in demand for shooting, as may be supposed; they fetch about a guinea per brace, while the hens, who owe their immunity to sober plumage and absence of tail worth mention, command as much as 25s. for breeding purposes.

Most farmers make it a rule to retain a certain proportion of the eggs throughout the season, and these as laid are entrusted to a staff of trustworthy domestic hens who are employed as foster-mothers. At Petersfield they employ four hundred of these professional nurses, all of steady and reliable character; no particular breed is preferred, the only question asked of the would-be seller of a fowl is, 'Does she sit well?' and if the bird fail to carry out the contract made on her behalf she is packed off in disgrace, and her price recovered in accordance with the stipulation made at the time of purchase. Three shillings is the standard price for a broody hen; if the manager did not fix his price he would probably spend nine-tenths of his busiest time in bargaining. The number of eggs committed to the care of one hen varies: at Petersfield the limit is fifteen, at Berkhampstead nineteen, the size of the 'nest' depending on the expert's opinion of the fowl's capabilities. The nursery arrangements also vary on different farms: at Petersfield a good deal is left to the honour of the hen, who, to her credit, seldom betrays her trust; on another large farm they adopt the somewhat cumbrous plan of placing the sitting fowls in open lockers round a large barn. This system entails a good deal of extra labour, as the hen must be lifted off her nest once a day to be fed; and as hens cannot be depended on to observe punctuality, they are tethered to pegs by short cords while they feed. dust themselves, sulk, or fight, as the temperament of each suggests. No doubt the foster-mothers get mixed occasionally when restored to their nests: but the domestic fowl is not an exacting bird, and raises no objection if placed on a new nest every day. As soon as the young family is hatched out, the farmer removes them with their fussy nurse to one of the large enclosures, where coops are ranged at intervals of half-adozen paces along a carefully-mown 'ride.' For about ten weeks they remain practically un-

disturbed save by the feeder, who visits them every morning and evening with supplies of meal, maize, and other dainties. By the time they are ten weeks old, however, their wings are tolerably well furnished, and it behoves the farmer to adopt measures to prevent the escape of his precious charges.

There is no great inducement for the young birds to try and break bounds; but a fright may startle them into taking wing, when, if any wind be blowing, they may easily 'top the fence' and fly away to rejoice the heart of some neighbouring landowner by settling in his woods. There are two methods of detaining the birds: one is to decoy them with food into spacious pens forty or fifty feet long; the other to 'clip and quill,' which, however, is regarded by some farmers as a makeshift expedient to be adopted only when necessity compels. Penning the birds involves much additional work, as the runs must be moved periodically, so as to take in a portion of fresh ground. At Petersfield every pen is moved once a week to cover one-third of fresh soil, and thus guard against the risk of staling. The runs are constructed in sections about nine feet long, and an ingenious contrivance is used to lighten the labour; this is a section, deeper and wider than the regulation size, mounted on low wheels. This is passed over the section it is desired to move, which is then drawn out like a telescope and closed until the next section can be brought up to it. Two great advantages are secured by the use of this device; one is that one man can do the work which would otherwise employ two; the other, that it does not frighten the birds, which, for some reason known only to themselves, are little alarmed by the vicinity of one man, but become mad with fear when two approach them.

If the farmer thinks that his birds grow stronger and wilder in large captivity he has recourse to the alternative plan. The birds are decoyed into a long run, the end sections of which are covered with string netting instead of the orthodox wire; having driven them gently up to this end the keepers remove an intervening section, and with large landing - nets carefully capture the birds one by one, placing them as caught in shallow hampers covered with sacking. This is rather a delicate operation, for the pheasants mobbed in the end of the run make frantic endeavours to escape, and the covering net suggests nothing so much as a boiling pot with the incessant bounding and jumping. If a wire-covered run were used for this purpose scores of birds would inevitably brain themselves or break their necks despite the seeming solidity of their skulls. The hampers when filled are probably carted into a fresh enclosure, as change of soil is now desirable; and within this four keepers set to work on the contents of the hampers. One man draws the bird from the basket and hands it to the second, who passes it on in a particular way to

the third, who is armed with a large and sharp pair of scissors. If the bird be a hen he clips half-a-dozen pinion-feathers at a stroke from one wing; if a cock he drops his scissors and deftly draws out as many, immediately releasing the bird, which runs a few yards, tries a flight, tumbles ignominiously, and, recovering, bolts into the long grass. The cocks are 'quilled,' as the phrase has it, because clipping leaves stumps which retard the growth of new flight-feathers, and the cocks will in all likelihood be wanted as 'full-winged' birds for sale in October. For the luckier hens there is no such hurry, and consequently no objection to their awaiting the natural sequence of events—the shedding of the elipped stumps in the moulting season and ultimate growth of the new primaries. fourth keeper, by the way, kneels by with his notebook on a coop and takes the census of cocks and hens.

The older the birds grow, as already remarked, the wilder they become. When next 'taken up' they have passed the age when an appeal to their little crops would be efficacious; though still dependent on the ministrations of the feeder, they are not to be decoyed by maize into a pen as in their innocent chickhood. It is necessary now to drive and net them. However well the beaters perform their work, some recalcitrant youngsters are sure to evade them by hiding in the grass, and to secure these a few old fowls are turned into the enclosure; the lonely young pheasants foregather with their sometime nurses, and the keepers are then able to drive and net roosters and pheasants together. A few strays are probably still left behind after this operation, and to recover these the farmer applies his knowledge of the pheasant's idiosyncrasics. If you are of observant habit you will, when passing through the high wire-netting fences, observe a welltrodden tunnel through the grass beside the netting. This 'run' is formed by the birds, which contract the habit of wandering round their prison - perhaps twenty acres in extent - presumably in search of the broken mesh which the farmer takes good care shall not exist. When the second drive with decoy fowls still leaves the tally of birds short, a few simple net-traps with bottle-neck entrances are set at intervals round the enclosure, and in a day or two every bird remaining is sure to find its way into one or other of these, from which its intelligence is not sufficient to show the way out.

'It all depends,' as the incipient solicitor said in answer to the questions in his examination paper, what happens to the pheasant when thus taken up in the autumn. They may be consigned in batches of ten or fifteen to roomy coops to spend the winter, and be used as breeding stock, or they may be clipped again and set at liberty for the same purpose. Autumn clipping, by the way, is not free from disadvantages; it allows of the birds being left at large in a twenty-acre field; but removal of the pinion-feathers, exposing the flank to cold and wet, is liable to cause disease. On the other hand, 'cooping' entails all the labour and expense of moving the pens periodically, and largely enhances the trouble of distributing food and water. Those unhappy ones among the cocks who are doomed to fulfil orders for shooting-and they are the large majority—cause least trouble; from the nets they go into hampers, and in the hampers into the carrier's cart, where we may bid them adieu till we meet them again if not introduced by 'mark over!' at a later stage in company with brown crumbs and bread sauce.

Human poachers give the pheasant-farmer but little annoyance. The keepers live on the ground, and if they should lack vigilance, the bounds of the farm are patrolled by watchdogs. These are not on 'point duty,' as the police would say; each is secured by a chain, which travels on a stout wire a hundred yards long or more, secured to staples in the ground at either end—an arrangement which at once affords him opportunity of exercise and largely increases his scope of active utility.

THE BULLY OF HAIPHONG.

PART II.



TER the heated atmosphere of the room they had just quitted, the comparative coolness of the night outside came upon them almost with a shock. They walked side by side for some little distance in silence,

and then the new-comer turned to the lieutenant beside him and warmly thanked him for the assistance he had so promptly rendered him.

'I beg you will not speak of that,' said the officer. 'I should have been playing a very poor

part had I not acted as I did. But, before we proceed farther, will you tell me if you are aware of the character of the individual with whom you have had the quarrel?

'I know nothing whatsoever of him,' replied the young man. 'I only know that he brought scandalous accusations against a person who has always shown himself to be one of my truest and kindest friends. On the strength of that I demanded an apology from him, and when he refused to give it I struck him. Pray, who may he be?'

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'He calls himself Desrolles,' the lieutenant replied, 'but whether that is his real name or not is more than I can tell you. He is a most extraordinary character; and if all we have been told concerning him be true, it is evident he is compelled to live in exile. He has no occupation, but dwells by himself in a strange old "go-down" a mile or so outside the town. Unfortunately for your peace of mind I must tell you that he is a noted duellist, ever ready to pick a quarrel, and always prepared to substantiate his argument by force of arms. He has been the bully of this colony for many years past. By the way, I don't think you have as yet told me your name.'

'My name is Henri Duchesne,' answered the young man, 'and I am staying for the present at the Hôtel de Tonking. I only arrived in Haiphong

this afternoon.'

'In that case you have certainly made good use of your time. I wish, however, you had picked a quarrel with any one else. As I have just said, Monsieur Desrolles is the most dangerous man you could have chosen, and from what I know of his character I am afraid there is not much fear of his relenting.'

'I beg you will not speak of such a thing. I have no desire that he should relent, nor would I permit it. We cannot let the name of one who is very dear to us, and to whom we owe almost everything we have in the world, be dragged in the dirt, and then allow his traducer to go scot-free. If my opponent is the dangerous man you say, then I'm afraid my chance is a poor one; but, in any case, better be dead than a traitor. See, this is my hotel. If you will enter it with me I shall be pleased to offer you such hospitality as it can afford.'

'I am afraid that cannot be,' said the lieutenant; 'there is so much to be done. I must return to the café in order to confer with Monsieur Desrolles's second, and to arrange the meeting for to-morrow morning. As he is the insulted party, of course the choice of weapons will rest with him; in case, however, that it should be necessary, I should be glad to know your preference.'

'I have none,' replied Henri Duchesne. 'I'm afraid I'm only fairly proficient with either,'

'In that case I suspect you stand but a poor chance of coming out of this affair alive. To be candid with you, I must tell you that Monsieur Desrolles has fought more duels than any of us can remember. I have seen him knock a cork off a post at thirty paces and hit a five-franc piece eight times out of ten at fifteen.'

Then clearly my chance to-morrow is a very poor one. However, it cannot be helped, and having no one to blame but myself, I must make the best of it. Now, for the present, adieu. I suppose you will call here after you have made the necessary arrangements?

'Without fail,' answered the lieutenant, and with a ceremonious bow withdrew.

A few minutes later Duchesne found himself

sitting in his own private apartment in the hotel, looking out across the moonlit veranda into the stretch of open country beyond. For the first time he realised how far distant he was from his own home and the quiet and peaceful, almost monotonous, life he had once considered so vitally necessary to his existence. Then by gradual transition his thoughts turned to his widowed mother and his one unmarried sister, both of whom had worked so hard, and had even surrendered their savings, in order that he should undertake the journey which was destined to result in such unexpected disaster. He wondered what their feelings would be when the news reached them that he had become the victim of a vulgar café brawl. He could imagine their distress when they should hear how all their hopes had ended. His mission had been an important one, so much had depended upon it; they had accustomed themselves to think that when he returned with the one item of intelligence which was necessary to make them as happy as folk could well be in this world, only peace and security could be their portion for the rest of their mundane existences. Now, however, on the very first day that he had landed in the country where he was to commence his inquiries, he had been drawn into a quarrel, and by his own action had shattered all their hopes and aspirations. If only he had thought of all this before he had taken upon himself another's battle, how different the result might have been! And yet, how could he in honour have acted otherwise? Only a few weeks before, he had shaken Monsieur de Saldenac by the hand and had been wished God-speed by him; he would have been less than human, therefore, had he permitted another to insult the person to whom he owed so much. From a contemplation of this he fell to thinking of the morning, and to wondering what his fate would be. His second, Monsieur Gustave Thielbert, had informed him of Desrolles's capabilities; and, as far as he could see, he was little better than a dead man.

With these thoughts in his mind he sat in the window and looked towards the jungle, remembering as he did so that it was just possible this might be his last evening upon earth. The thought was not a consoling one, and he endeavoured to put it away from him as quickly as might be; but it was not to be dispelled. By the time his second returned to acquaint him with the decision that had been arrived at he was as nervous as a little child.

'It is all settled,' said the lieutenant as he entered the room and found the young man so eagerly awaiting him. 'I have seen Desrolles's second, who informs me that they are prepared to choose swords. The hour will be sunrise; and, if you will permit me, I will call here in plenty of time to conduct you to the rendezvous.'

Duchesne having thanked him, the other withdrew, leaving his principal to pass the night as

best he could.

Next morning the sun had not yet made its appearance above the horizon when Duchesne left the hotel and found the lieutenant awaiting him in the cool gray street outside. With the exception of a few natives, who seemed to have no settled place of abode, nobody was astir, so that they were able to make their way out of the town to a spot in the jungle, with which it appeared the lieutenant was already well acquainted, without attracting any unnecessary attention.

Having arrived there, they found Desrolles and his second awaiting them. The challenger received his opponent with a stately bow, and, while the seconds withdrew to arrange the preliminaries, contented himself by walking up and down the jungle glade switching the heads off small flowers with the cane he carried in his hand. A few moments later the combatants were supplied with their weapons and placed opposite each other in the centre of the glade. As he took his sword and tested its steel upon the ground before him, Duchesne thought of a certain letter he had written the previous evening, and which he had made his second promise to post without fail should the encounter terminate as fatally as he had every reason to expect. Contrary, however, to the anticipations of the seconds, who had taken their places on either side of the combatants, the duel did not terminate as quickly as they had expected. From what the lieutenant had heard, he had no idea that his principal would prove in any way capable of affording Desrolles sport even for a few minutes. He had imagined that they would cross swords, and that almost before one could look round there would be a flash of steel, and after that Duchesne would be lying upon the ground fatally wounded. To his surprise, however, he discovered that the young man was no mean fencer. His strength and science were not perhaps equal to those of his antagonist, but he was young and at the full height of his power, and before they had crossed swords three minutes it was plain to those about them that unless Desrolles put into execution some of those feints for which he was famous, the youngster would be able to hold his own against him for some considerable time to come. Again and again they separated, rested for an interval, and then re-engaged. So far as the onlookers could see, neither had as yet received a scratch. Then the older man lunged, Duchesne parried, there was a flicker and a momentary tangle of steel, and a second later the hitherto unvanquished Desrolles fell backwards and measured his length upon the ground, with a thrust between his ribs. For a few seconds those present could scarcely believe their eyes. They stared first at Duchesne, and then at his prostrate antagonist, scarcely able to credit the evidence of their senses; and, if the truth must be told, the hero of the combat was as amazed as they. Meanwhile the doctor, who had accompanied them in case his services should be required, had knelt beside the fallen man, and was endeavouring to staunch the wound. Desrolles himself had lost consciousness.

'Oh, what have I done?' cried the unhappy youth who had caused the trouble, and who now seemed to see the effect of his action rising up before him.

'You have vanquished the best swordsman in Tonking,' answered his second quietly as he took the sword from his hand and proceeded to wipe the blade upon a tuft of grass. 'Thanks to you, Monsieur Desrolles's reign of terror is at an end.'

'For pity's sake don't talk like that,' cried Duchesne. 'If this man dies I shall never be able to hold up my head again.'

'Nonsense,' replied his second. 'It was a fair fight, as those present will be able to testify. Now, if you will be guided by me, you will return to the town, transact your business, whatever it may be, and then take your departure from Tonking. If I know anything of Monsieur Desrolles, he will be on his feet again before you can look round, and quite ready to turn the tables on you at the first convenient opportunity.'

'I am grateful to you for your advice,' said Duchesne, 'but what you propose cannot be. I have business here that will take longer to transact than you think.'

Then, approaching the surgeon, he inquired nervously after his patient.

'It is a nasty wound,' replied the other, 'and he has lost a lot of blood; but I think, if we get him back to his own house and find some one to nurse him, there will not be much fear for his recovery. The fellow has a constitution like iron, and, as you can see for yourself, his body is covered with wounds received in this sort of way.'

'How far is it to his house?'

'Not more than a quarter of a mile.'

'And how do you propose to get him there?'

'Easily enough. We will construct a stretcher of bamboos and carry him upon it.'

This was no sooner said than done; and a quarter of an hour later those curious in such matters might have observed one of the principals and the two seconds of the recent duel assisting to carry the fallen man through the stifling jungle towards his own abode. It was a strange place they found when they reached it: a long, dilapidated building, half-native, half-European, surrounded by a broad veranda, the latter covered with a creeper the flowers of which seemed to embody all the colours of the rainbow. It was a place in which a naturalist or a botanist would have found life delightful, but to Duchesne it seemed desolate beyond all possible conception.

Each bearing his share in supporting the litter upon which the wounded man lay, they ascended the two steps into the veranda and passed into the only room which the fallen man had made habitable. It was a large apartment, and with a little taste might have been made homel not, in a certain degree, picturesque. Now, he it

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was in such confusion that any attempt to set it straight would have seemed worse than hopeless. The floor was of a kind of wood that might have been capable of taking a high polish, but was now black, not only with dirt, but with all sorts of messes that had been spilt upon it during the time its present occupant had been in possession. One or two coloured prints decorated the walls, but upon them the climate had exercised a disastrous effect. A portrait of the great Napoleon hung above the door, a table stood in the centre of the room, with two cane chairs beside it; while in one of the farther corners stood the owner's bed, covered with a tattered quilt. The cooking, so it afterwards appeared, was done by an Annamite boy in a hut at the rear of the dwelling; and here Desrolles had dwelt ever since the disastrous circumstances occurred which had united to bring him to Tonking.

Having laid him upon his bed, the doctor convinced himself that the movement caused by the litter had had no bad effect upon the wound, and the others stood round and waited for what

was to happen next.

'One thing is very certain, gentlemen,' said the doctor as he finished his survey, 'he must not be left alone. Perhaps if one of you would call at the convent on your way to town we might get a Sister to come out and take charge of him.'

'That is not necessary,' said Duchesne, taking a step forward. 'I shall remain with him. As I was the cause of his wound, it is only fit and proper I should do all in my power to assist him to recover from it.'

The other men said nothing, but the doctor looked up at Duchesne sharply.

'I thought you were his enemy,' he said. 'Other-

wise, why did you fight him?'

'Because I could not help myself,' the young man replied. 'Now I wish to remedy what I have done.'

'You do, do you? Well, think it over before you commit yourself,' he said. 'Remember, your nursing will not be a matter of two or three days, but of some weeks. The life of our friend here will depend entirely upon your care; for I don't mind telling you he is in a precarious position.'

'The more reason that I should remain with him, said Duchesne. 'Do not let us waste any more time talking. My mind is made up, and nothing will turn me from it. I can be very obstinate when I choose.'

'So it would appear,' said the doctor quietly.

A few moments later the remainder of the party had returned to the town, amazed at the turn events had taken, leaving the doctor and Duchesne alone in the house with their patient.

To Duchesne it seemed as if he were acting a part in some evil dream. He could scarcely believe that at the same hour the day before he was on board the mail-boat out of sight of land, knowing nothing of Tonking, and little dreaming what was in store for him as soon as he should put foot ashore. Within those fourteen hours he had landed in a strange country, had picked a quarrel, fought a duel, and was now devoting himself to the task of nursing back to life the adversary he had wounded.

'Do you think you understand your duties?' the doctor inquired as he put into their various cases

the instruments he had been using. 'Perfectly,' answered Duchesne. 'And you may be sure I will do my best. Now, one question before you go?'

'A hundred if you like.'

'I am a stranger in Tonking,' Duchesne began, 'and I am here in order to try and discover the whereabouts of a relative who disappeared from France about twenty-five years ago. I thought perhaps you might know him.'

'My dear fellow,' said the doctor, with a laugh, 'surely you do not suppose I am familiar with every man who has cleared out of his native country that length of time ago? Pray, what was this man's

name?

'He was the Count de Clairvaux,' replied Duchesne, 'a noted man in his day. I have lately discovered that he is heir to great wealth, and if he is dead I inherit the property as next-of-kin.'

'In that case you rather hope he is dead, I

suppose?'

'I do not hope that,' returned the other gravely. 'I trust I may never desire any man's death; but if he were dead, and I could prove it, I do not deny that it would be a very good thing for us all, particularly for my mother and sister, who have known great poverty.'

At this juncture there was the sound of a slight movement from the man on the bed. The others turned, to find their patient conscious once more. The doctor went up to him and placed his fingers on his wrist.

'Not a word as you love your life,' he said. 'If you attempt to speak before I give you permission I can promise you you will be a dead man in less than five minutes. Just bear that in mind.'

The wounded man scowled at them but said nothing. He resented the intrusion upon his privacy, but he felt that the case was against him, and the fear of death-which, strange to relate, is quite distinct from the fear of dying-held him speechless. However, he was not going to make them any the more welcome to his dwelling.

'Now, Monsieur Duchesne, with your permission I will take my leave, said the doctor, when he had given some further instructions and had taken his helmet from the chair on which he had placed it. 'From what I know of the style of living of our friend yonder, you will not be able to say very much for the cuisine. The boy you will doubtless find chewing betel-nut at the back. He had better accompany me to town, when I will furnish him with such stores as I think you will require.'

Duchesne thanked him, and the other immediately withdrew, leaving him alone with his patient.

GEORGE MORTIMER PULLMAN.



HERE have been, and there are, a great many men who by their inborn talents and their own unaided efforts have risen above their fellowmen and occupied leading positions in after-life; but there are

not so many who from a low station in the social scale have advanced to the eminence of affluence and at the same time have conferred lasting benefits on the community. This is especially true of the millionaires of America, among whom may be found those who have no other claim to notice than that of having become prosperous men of business and amassed large fortunes.

George Mortimer Pullman-whose death has just been recorded-although he died rich, was not one of these. Besides being successful from a worldly point of view, he has established a record, of which his countrymen may well be proud, as a benefactor of society at large. The subject of our notice was born on March 3, 1831, and he was therefore in the sixty-seventh year at the time of his decease. His father was a small farmer of Chautauqua County, New York State, and he was not able to give his son any other education than that provided in the local schools; but the little education young George did receive was of a good quality, and his home-training was such as to aid him in the formation of fixed habits of industry and firmly-settled principles of morality and integrity. Although he was small of stature, his employment in the fields imparted to his body that degree of toughness and activity common to American farmers' boys.

At the early age of fourteen he was employed as a boy-of-all-work in a country store. When seventeen he proceeded to Albion (N.Y.), where his brother was carrying on business as a cabinet-maker. Here he served an apprenticeship, during which he was taught to employ wood and woven stuffs in the most useful and decorative manner. But, besides acquiring a taste in that direction, he also learned something of engineering and mechanics generally, and gained confidence in his own faculty for devising mechanical appliances. By sheer industry and thrift he also gathered a few dollars with which to start in business for himself. The first opportunity he had to do so he seized with avidity.

It was at the time when the Erie Canal was being widened. It became necessary to bodily move some of the warehouses, both in brick and stone, that were worth saving, and young Pullman was one of the first to do it. The undertaking proved a financial success to him, and besides he gained great experience and established

a record which was to be of great value to him afterwards. Contract followed contract; but his greatest success in this line awaited him elsewhere. At the foot of Lake Michigan, the new city of Chicago had sprung up with such rapidity that people forgot all about one important point, that of its drainage and sewerage. It was ultimately found that the lower floors of the buildings were but little, in places not at all, above the level of the lake. In order to construct sewers it became necessary to raise up several feet, and to hold up, whole blocks of business premises, both in brick and stone, while new cellars and foundations were put under them. In 1859 Pullman moved from New York to Chicago to take part in this new feat of engineering.

But already in 1858 Pullman had taken up a new idea, in following out which he established a reputation which will endure as long as railways last. At that time the railway system of the United States was yet in its infancy; but the extension of the roads westward was going on apace, and long-distance travelling was extending along with it. It became necessary to improve passenger coaches, and attempts were made in that direction; but they proved failures. It was not until George Pullman took the matter seriously in hand that the long-required reform came. He carried on a series of experiments by remodelling two day-coaches on the Chicago and Alton Railroad, and later on the Galena Railroad. He met with but little encouragement, however, for he was a pioneer, and no attention had yet been paid to the idea of making long-distance journeys endurable, if not enjoyable. Meanwhile Pullman was working on steadily in the development of his own plans. He did his part in raising Chicago to a higher level; he added considerably to the capital required for other undertakings; but it was not before 1863 that he was ready to commence his new enterprise. In that year he rented suitable workshops, engaged a staff, and began the development of his scheme. His fundamental idea was to secure sleep for the railway traveller, and for that purpose he applied powerful springs upon trucks with sixteen wheels-entirely an innovation. The result was his first sleeping-car, the 'Pioneer,' at an outlay of eighteen thousand dollars. way men stood aghast at this lavish outlay; but they began to think seriously about it, and Mr James F. Joy, the president of the Michigan Central Railroad, was very nearly so rash as to try the experiment on his own line. Then Pullman stepped in, and built four more cars, costing twenty-four thousand dollars each, so that even enterprising Mr Joy was startled by such extravagance. To test the matter, Pullman offered to ne

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place his cars along with the old coaches, and to see which would pay best. The result was that the old coaches were always empty until the new sleeping-cars were filled, the travelling public being enthusiastic about the improvement. Still the railway world objected; but by keeping his interests in the invention unencumbered, since he had been able to carry on all the preliminary experiments at his own expense, Pullman was independent of all outside help. He was the one-man power, unhindered. The vast extent of the United States and the length of its railway journeys proved a permanent foundation for his enterprise. His own personal character and ability and administrative capacity greatly aided him; and success attended success, until the Pullman car became an established institution of American railway travelling.

Another success, however, awaited Pullman in the train of his first invention. He had succeeded in establishing a prosperous manufacturing company, which had workshops at St Louis (Mo.), Elmira (N.Y.), Detroit (Mich.), and Wilmington (Del.). Yet all these manufacturing resources did not enable the company to keep pace with the demand for the cars, and it became necessary to provide additional facilities. This Pullman did by another achievement—he invented a new town which would meet his requirements, and proceeded with its construction very much, as in 1863, he had put together the 'Pioneer.' As an attempt to purchase any large parcel of land all at once would have sent it up to a speculative value, great circumspection had to be used in its acquisition. By purchasing through third parties, he was able to secure about 3500 acres of land on the shore of Calumet Lake, then outside the city limits of Chicago, for less than eight hundred thousand dollars. In 1880 the construction of 'Pullman City' was begun. Profiting by his Chicago experience, Pullman began by constructing his sewers first; then came the water-mains and the other piping for which it is generally customary to tear up town streets after they have been made. The streets and avenues were then laid out, and finally the erection of workshops for the manufacture of railway cars and their outfits, and of dwellings for single families, as well as flats, was proceeded with. The construction of stores and other workshops followed. A remarkable result was obtained. In a town now of 12,000 inhabitants there is not a single drinkingsaloon nor a house of ill-fame. Among the first buildings erected were two churches, the use of which, however, must be paid for. Only the public library, containing about 8000 volumes, was the free gift of Mr Pullman. There are grounds for athletic sports, a large arcade for general shopping, a market hall, and a public school attended by over 1000 children. The

original idea was that good wages should be paid, that all rents should be reasonably low, and that food supplies should be of the best and be sold at fair prices. All this has been realised, and, what with sanitation and administration, a model town has been erected.

After more than a dozen years of practical working what do we find? Of the 12,000 inhabitants, 6324 are employed by the Pullman Car Company. The average wage of these, including boys and women, is \$2.26 per day. They have deposits amounting to \$632,800 in the savingsbank, or an average of \$316 to each person. The eight miles of the well-paved streets of Pullman are scrupulously clean, and so is its moral character, and workmen from its shops are sought for as men who have a well-known certificate. As was said at the beginning of this article, there is no other business career which can be at all compared with that of the late Mr. Pullman. Other men were his peers in railway enterprise, or even exceeded him in accumulated wealth, but none excelled him in his originality of conception or in the penetration which foresaw a coming demand and promptly met it. It may be finally added, from the latest statistics which are available, that the gross earnings of the Pullman Company, which in its first business year were \$280,000, were \$10,002,356 for 1891-92. Its dividends were \$2,300,000, and it added \$3,250,389 to its 'surplus fund.' Upon its roads the company uses 2512 sleeping, parlour or drawingroom, and dining cars, which does not include some that are running in foreign countries-for instance, in Australia. During the year ended June 30, 1892, Pullman cars carried 5,279,930 passengers, and ran 191,255,656 miles. The latest return shows that the Pullman Car Company at the present time owns about 2600 cars, which run over more than 126,000 miles of road, and furnish sleeping-berths on the rails to between six and seven million travellers every year. The longest regular, unbroken run made by Pullman cars is that of 4332 miles from Boston (Mass.) to Los Angeles (Southern California). The nominal capital of the company is \$30,000,000, the present market value of which is nearly double that amount.

To Sir James Allport, general manager of the Midland Railway, belongs the credit of introducing the Pullman car service into this country, as after an interview with Pullman in America in 1872, the first train was run in England in 1875. The service soon spread to all the important English lines, and has been the signal, as every traveller knows, for even greater comfort and luxury in railway travelling.

Pullman was married to Miss Hattie Singer, of San Francisco, by whom he left two sons and two daughters.

A KALAHARI STORY.

By CARL S. GUNNERY.



AKE the whip and help them along, Jack. I'm going to ride up to the kopjie.

The speaker, a youth of seventeen, handed the long whip to his companion, unhitched a horse

that was tied to the back of the wagon, and jumped lightly into the saddle.

'Has Makolo come back yet?' asked a weak voice from the inside of the tent-wagon.

'No, father; but I'm going on to the kopjie to have a look for him and choose a good place to outspan. How do you feel now?'

'About the same, my boy; the jolting is awful.'
'If we get through to-night we ought to have you safe into Shoshong in three days; then we'll be able to fix you up better.'

He rode away towards the hill, soon leaving the wagon behind. He kept a sharp lookout, and carried a rifle slung on his back. A revolver just showed in his belt, and he himself looked worn and troubled.

It was little wonder he looked troubled, for, since his father had been seriously wounded, on him had devolved the task of getting the wagon, his father, and all their possessions back to a place of safety. To have to pilot and protect a wagon heavily loaded with ivory and skins through three hundred miles of bad country, water scarce, no roads, the wheels often a foot deep in sand or jumping over boulders, and day and night expecting an attack from some hostile tribe of Kaffirs, with no help except from his younger brother and three Cape Kaffirs-that is a hard task to set a man, it is an awful responsibility for a boy of seventeen. But he did not shrink from it. As his horse picked a way up the kopjie he looked anxiously for Makolo. He chose a place to outspan for the night-the strongest place should they be attacked. He was glad to find a good stream of fresh water among the rocks. There was little vegetation except caeti; but below, on the plain, was rich grass for the cattle. Away in the distance he could see plainly the hills round Shoshoug, the stronghold of the friendly Bamangwatos; but he knew that he was now in one of the most dangerous parts of his journey, not far from the Kalahari Bushmen, and still in the country of the chief from whom they were fleeing.

The wagon was fixed up for the night, the evening meal partaken, and darkness was on them before Makolo arrived. He was only a lad, about as old as the younger of the two brothers; but they had perfect reliance on him. Once Ralph Watson had saved his life; since then Makolo had served Ralph and Jack with all the

questionless fidelity of a dog. His dress consisted only of a monkey-skin muchi or apron, and in his hand he carried a rifle. He sat down on his haunches, and, replying to the questions of the two lads, told them that he had been to a kraal distant 'four hours' run' for a man, and that the Kaffirs were drinking beer and dancing, which looked bad. It was not a big kraal, only about twenty men; but they were bad men, and he expected an attack.

When do you think they will come? asked ack.

'Just before the sun shows,' said the Kaffir.
'Come along, then,' said Ralph; 'at any rate

'Come along, then,' said Ralph; 'at any rative will die hard.'

Makolo took a hasty meal of a sort of porridge and a long drink of water, then helped the two boys and the other Kaffirs to cut down a lot of cacti to form a rough barrier in the most unprotected spots. The oxen were driven in, the rifles loaded, and everything made ready for the expected fray. Inside the wagon Hunter Watson lay half-conscious and burning with fever. After a good trading trip with his two sons along the edge of the Kalahari, he had been forced into a quarrel by a small independent chief, and, wounded badly in the thigh, he had only been saved by the pluck of his two sons. Bitterly he had often regretted that he had consented to allow his sons to adopt his adventurous mode of life, and now it seemed that the end had come for all of them. He could not stand, and how could two boys with only three Kaffirs withstand an attack of a horde of yelling savages?

They all had a couple of hours' sleep during the night, watching in turns, but soon after four o'clock each was well awake. They tried to eat a little food and then took their places. They could be attacked on all sides, but they were on the top of the hill, with clear ground all round them. Hunter Watson had managed to shift his position so as to be able to assist as far as possible from the wagon; and just before the first streaks of dawn he silently shook hands with his two sons and waited.

They had not long to wait; the foe were on them on all sides—fully thirty of them.

'Don't waste a shot,' shouted Ralph. 'For God's sake keep cool and kill every time.'

A shower of assegais fell into the enclosure, some striking the wagon and some the oxen, who began to bellow with fright. The shouts sounded all round them, and the coming rush of human wild beasts was only a shadow in the dim light.

Three rifles spoke together, answered again by horrid yells, then another, and another. Then revolvers came into use. 'Thank God for those

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cactus bushes!' thought the boys. Had they not been there nothing could have saved the gallant little band of defenders. All was noise of strife, the crack of firearms, groams and yells of pain and the fever of battle, the bellowing of the terrified oxen, the hard breathing of fighting men.

The light increases. See! There is a huge, naked Kaffir climbing over the boulders; he is inside. Makolo sees him, and before he advances two steps an assegai well aimed transfixes his throat and he falls heavily to the earth. In the corner farthest from the wagon Ralph has expended every bullet. He has no time to load again, and is using the club end of his rifle to keep back the rush. Blood is flowing from his arm and his left leg, but he fights like a demon.

At every point the fight is fierce. Jack falls with a groan on one knee. Two assegais whiz past him; he uses his last cartridge on a man who has made his way half over the barricade. The man falls over the top, and another, leaping lightly on to his body, poises his weapon to strike. Jack feels his hour has come; but no, a rifle-shot from the wagon saves him just in time, and his life is given back to him once more. He scrambles up on to his feet half-dazed, and, leaning against a rock, reloads his revolver and rifle. There seemed to be a lull for a moment. Ralph and Jack had time to look round them. Four men lay dead in the enclosure; they had forced their way in only to die. One was speared on his own stabbing-assegai; he must have fallen on it as he was shot, and his face was distorted by a horrid grin. Outside they could not see how many they had accounted for; but of their own number none had escaped altogether. They saw Makolo, breathing heavily by the wagon, tear out a piece of broken assegai which stuck in his left arm. His face, too, was covered with blood and dust. Over by the corner one of their two other Cape Kaffirs lay dead on the body of an enemy, his hands still clasped in death round his throat.

But it was only a momentary lull, and soon they were all at it as hard as ever. It seemed impossible to keep them back. Lucky it was for them that they had been able to reload, and in the good light they never wasted a shot. Now and again a shot from the end of the wagon told that the hunter was still alive. The tent of the wagon was stuck all over with assegais.

The fight was getting hotter, fiercer. It seemed that they could not hold out longer. Each man had determined never to be taken alive, when Ralph shouted out, with awful anguish in his voice, 'It's all up, Jack; here come some more of them. Good-bye, old chap.'

But what was it in the fast-approaching body of men that he saw? Surely they were white shields of cow-hide! They were—the white shields of the Bamangwatos.

'They are friends,' he shouted—'friends from Shoshong. Keep going, old chap.'

Just then the attacking party also saw the new-comers. They were within half a mile now. The cry went round among them and they fied. Over the stockade Ralph scrambled, and Jack tried to follow, but neither had strength enough left to run; but they saw their enemies being chased away over the plains by the group of friendly natives.

Some of the new-comers advanced straight to the enclosure. They were a hunting party, had heard the shots, and come on at once. Lucky for the boys they had been so near, else they must surely have been slain.

But what a sight met their eyes in the small enclosure! Hanging with his head out of the end of the wagon, a long assegai through his breast, but still grasping his trusty rifle, Hunter Watson lay dead. He had fired his last shot, fighting against fearful odds, and was dead before he knew that help had come.

A sad morning indeed for the two brothers, for not only were they fatherless now, but there, lying beside a heap of slain, lay Makolo. Was he dead too? Ralph knelt down beside him and lifted up his head. No—he wasn't dead; he moved his line

One of the friendly natives gave him water from a gourd. He smiled into Ralph's face,

We beat them—boss,' he whispered; 'beat them—six against many—good-bye—boss Ralph.'

He smiled again—and his faithful black head fell back on Ralph's shoulder—and he died happy.

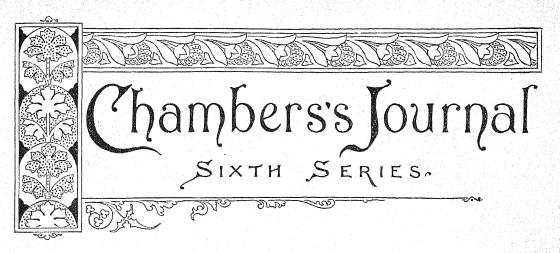
On the top of the kopjie they buried Hunter Watson, and left him to lie there among the plains and hills he had hunted over for years. Beside him they buried Makolo and the other Kaffir who had fought so well. Then with sad hearts they turned away from the spot where they had left father and friends.

The friendlies treated them kindly and escorted them back to Shoshong. They admired the pluck of the two white boys who had fought like men, and when they were rested and recovered from their wounds, started them on their way south, asking them to come back and trade in their country.

They came back and did well, for the trading stations of Watson Brothers are known even to-day in the land of the Bamangwatos.

SUNRISE.

When the violet arch grows pearly gray
O'er the eastern plains afar,
And the blackbird wakes to its matin lay
By the glint of the morning star;
When dusky phantons of the night
Do fold their robes and flee,
And the jubilant fairies take their flight
To their home by the greenwood tree;
When fugitive shades to the woodland rush,
And the darkness westward flies,
The fair young Dawn with a rosy flush
Looks up in the eastern skies.



FACETIÆ OF CANADIAN MONEY-LENDING.

By V. L. R.



MONG a daily multitude of routine transactions, with an odd happening of a less prosaic and more emotional character-the gentler sex usually being strongly in evidence herethe business of a land mortgage

corporation's office is occasionally varied by a shaft of humour, intentional or otherwise, from some of its correspondents. These outbursts, generally emanating from those of the bucolic persuasion, are often good.

There was, for instance, the written appeal made not long since to the mortgagees by a rural borrower, who, instead of proffering the stereotyped request for an extension of time for payment of interest 'to he trashed'-meaning, of course, until he had threshed his grain-asked for the favour on the more serious if less cogent plea that he was already 'all covered with morgeses.' This announcement he seemed to regard as about the most 'fetching' he could advance. Whether the mortgagees so viewed it, or whether they looked upon it in the light of an unwelcome revelation, would be another

Another correspondent sending a remittance, writes: 'i am a day late be good enough to overlook it rained like fun all day yesterday could not get out snowing like blazers here to-day except my best wishes.'

The following from a French Canadian-an excellent borrower is Jean Baptiste too-is a sample of many letters, meant to be in English, received from that branch of our community: 'i gone as you if you can lent me four hundered dolors more on my place for 10 year Wich the same condition you lent me the last monez by Kip what is due to you for this Spring of the 400 i gone bill a New house this spring and i gone Need a few onderd dolors more pleas anser Me at once and oblige. Of course the discerning reader will, after allowing for idiosyncrasies of expression and lack of punctuation in this, readily interpret it to mean that the writer desires a further advance of \$400, the interest due on a loan already in force to be deducted from proceeds of new mortgage, the balance to go towards cost of erecting a dwelling-house. The mortgagees having written in answer to this, declining to make the required additional advance, shortly afterwards received the following 'if-you-don't-somebody-elsewill' reply, of a type quite conmon in like cases, and the sentiment expressed not being by any means confined to any particular nationality or creed: 'pleas lett me know by farst mail amuch i how you if you don't want give me what iax i gone have some from another company my place is good for \$--- in any time anser by farst mail.

The next communication in order is from another section of our population, its writer being of the Teutonic section of the community: 'my intenches is to pay yous out Know on the morge that yous hold agonest my farm that is if i don't geet delaid with my money I expect it on the first or the fift of april you can ancer me with return mail.' It is hardly necessary to explain here beyond the first few words; the writer's announcement being that his 'intentions is' to now pay off his loan in full. Such 'intenches' are of course welcomed or otherwise by the lenders, according to their experience with the borrower and security, or both.

Considering the difficulty experienced by the recipients in deciphering the handwriting of the following epistle, its concluding sentence is not without humour: 'Will you please Send me the amount of my Entrise [interest] Dew up to Jeneury last as I want to pay up in full. I Want to have Morgas Renued for Seven years. I want to change the Date from June to Jeneury as it would Put me in a better Pishion to Pay. Please rite Planely

so I can read it without truble.'

One of the details of the business of the regular lender on the security of farms that causes him most trouble is that of having the fire premiums on the buildings paid with some degree of regularity. The insurance companies generally look to the mortgagee for payment of these premiums; the average borrower, either from lack of business

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JAN. 15, 1898.

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experience, or from Arcadian simplicity, or what our Yankee cousins expressively term 'general cussedness,' seeming to be possessed with the belief that so long as his property is mortgaged its buildings must be insured somewhere, and that the premium is bound to be paid somehow, even if as a last shift, and when it cannot be in some mysterious and unexplained way otherwise realised, it has to be liquidated by himself. In the meantime, if the opulent mortgagee's insurance clerk has developed a few more wrinkles or gray hairs over the worry caused by this and hundreds of other concurrent incidents like it, the borrower's consolatory reflection is: 'Well, them loan companies is dashed onreasonable, anyhow, gol darn 'em.' As witness this typical reply to a request by a lender for repayment of a premium disbursed by him many months before for the borrower's account; note the austere, not to say injured, tone: 'I was not Awair that there was Hany insurance on the bildins thair was not anything said about it at the time but you companies want everything in your hands I enclose \$----'

That 'figures can't lie'-that is, under some conditions—most paying or receiving tellers will decline to admit. We know of one teller who, temporarily combining both paying and receiving functions during the holiday season, found himself at the end of a certain day's business \$139 short. Try as he would, he could not locate the error. He was certain the amount had not been actually overpaid by him, and as sure that no one but himself had had access to the cash during the day; but there was little satisfaction in this. His honesty was unquestioned, and accordingly, as he insisted that time would clear the matter up, the amount was in the meantime charged to 'suspense accounts,' and developments awaited. Instructions were given the ledger-keepers to use more than ordinary care in comparing with the ledgers every deposit pass-book presented, and some six months later this resulted in the vindication of the official. A pass-book was handed in showing a credit of \$25 on the day of the shortage; the ledger entry was \$164, the difference between the two of course representing the sought-for \$139. The mistake arose from the fact that instead of having entered properly, first the depositor's name, then the number of his ledger folio (which in this case was 164), and, finally the amount to be credited, \$25, the teller had inadvertently repeated the folio number in the cash column. The discovery of this mistake within such a comparatively short time would have been all but impossible had it not chanced that the deposit account in question was one of the kind more or less frequently disturbed, involving correspondingly frequent inspection of the depositor's pass-book. Had the account been one of the sort referred to in the following paragraph, the teller would likely have been called upon to make the amount good long ere this.

A man deposited with one of our savings-banks

on April 4, 1873, \$2800; and on June 23 of the following year, \$600 more, at the then prevailing rate of interest. Nothing further was heard from or of him by the bank for sixteen years, during which period the interest on his \$3400 had of course been regularly added and compounded halfyearly in the ledgers. Towards the close of 1890 a couple of rustic-looking young men entered the bank, and exhibiting a yellow, age-worn pass-book (the one for the account in question), asked 'if it was any good.' Inspection and inquiry of course proved that it was-very much so. The depositor had died some years previously, leaving a will disposing of his estate, but making no mention of the deposit, the existence of which he appeared either to have forgotten or to have revealed to nobody. The savings-bank, knowing nothing of his whereabouts, had of course remained in ignorance of the facts. One day, however, the men referred to, in pulling down an old shed near their benefactor's former dwelling, found concealed behind the sheeting of one of the walls this book. Plentiful libations of rain-water during its long incarceration had impaired the whiteness of its leaves, some of which had also been gnawed by mice; altogether it was 'not much to look at.' Nevertheless, investigation disclosed that it was perfectly valid, and in due course the delighted heirs surrendered it for \$7766 (£1553) cash—a very substantial as well as unlooked-for Christmas-box.

Of course, in the correspondence incidental to the business of the land mortgagee, the word 'mortgage' must necessarily recur quite frequently. It is surprising how seldom the word is correctly spelled by the average borrower. The favourite orthography is of course the phonetic 'morgage:' but 'morge,' 'morgich,' and even 'morgue,' have their votaries; while there are dozens of other ways, more or less ingenious, that are met with in a correspondence of large volume, and embracing customers of varied descent. So impressed did the writer become some years ago with the frequency and persistency with which this word was misspelled, as it came under his notice in different communications, that he started to list the various efforts in this direction as he came across them. This list is enhighed .

This fist is sin	gomea:	
1. Morgigs.	18. Mortgig.	35. Mortguage.
2. Morguage.	19. Marage.	36. Morgies.
3. Morgeses.	20. Mortegage,	37. Mordgage.
4. Morgage.	21. Morgeg.	38. Moraegee.
5. Morlage,	22. Martgage.	39. Mortugage.
6. Morehg.	23. Morgege.	40. Morggas.
7. Morage.	24. Mortgagw.	41. Martage.
8. Mortague.	25. Margage.	42. Morge.
9. Mortage.	26. Mortagage.	43. Morguge.
10, Morgich.	27. Matagss.	44. Morgest,
11. Moretgage.	28. Mourge.	45. Morgiage.
12. Morgoge.	29. Morgague.	46. Mertgage.
13. Morgue.	30. Murthgage.	47. Mogage.
14. Mortgague.	31. Martagage.	48. Mortgag.
15. Mordgatge.	32. Morgag.	49. Mortag.
16. Mogueage.	33. Mortagee.	50. Moagage.
17. Morgueage.	34. Morgago.	51. Morige.

52. Morggage. 60. Mortegague. 68. Morgg. 69. Mergage. 53. Mortgare. 61. Morguest. 70. Moragge. 54. Mourtgage. 62. Moguagu. 63. Mortoage. 71. Morggge. 55. Mortcage. 72. Morgetse. 56. Motage. 64. Morg. 57. Mortgue. 65. Martgager. 73. Moraj. 58. Moraage. 66. Morguga. 74. Maugrech. 67. Morgeage. Mordage.

While this collection contains no less than

seventy-four versions of the word's orthography—every one authentic and every one wrong—it is believed the list is capable of being added to, at the expense of a moderate degree of systematic watchfulness, to the extent of at least the twenty-six more variations required to make the even hundred. But probably the seventy-four presented will supply a sufficiently rich vocabulary for ordinary use !

JOHN BURNET OF BARNS.

CHAPTER VII.—THE 'PEGASUS' INN AT PEEBLES, AND HOW A STRANGER RETURNED FROM THE WARS.



F my doings for some months after my father's death I must tell hastily. I fell heir to the lands of Barns; and, being of age, entered at once into my possession. The place remained the same as in my father's

time-the same servants and the same ways about the house. I lived simply as I had always lived, spending my days in seeing to the land, in fieldsports, and some little study, for I had not altogether forsaken the Muses. But all the time I felt as one who is kept at home against his will, being conscious of a restlessness and an inclination to travel which was new to me, but which, I doubt not, is common to all young men at this time of life. I talked much with Tam Todd of the lands which he had visited, and heard of the Dutch towns, with their strange shipping, their canals, and orderly houses; and of the rough Norlanders, clad in the skins of wild animals, who came down to the Swedish markets to trade; of the soldiery of Germany and France, and the Scots who had gone over there to push their fortunes with their swords; and what I loved best, of the salt sea, with its boundless waste of waters and wild tales of shipwreck. Formerly I had been wont often to bid Tam sharply to hold his peace when he entered on one of his interminable narrations; but now I sat and drank in every word like a thirsty man. It was the winter-time, when the roads were often snowed up, and all the folk of the place gathered in the great kitchen at nights round the fire; so it was the time for stories, and we had our fill of them.

One blustering day, the first Monday, I think, after the New Year, when the ice was beginning to melt from the burns, and a wet, cold wind from the north-west was blowing, I rode down to Peebles to settle some matters about money with Saunders Blackett, who had managed my father's affairs and was now entrusted with mine. All things were done to my satisfaction; so, bethinking myself that the way to Barns was cold and long, and that it was yet early in the afternoon, being scarce four o'clock, I found myself

thinking pleasantly of the warm inn-parlour of the 'Pegasus,' so thither I went.

The 'Pegasus' or 'Peg' inn stands at the corner of the Northgate and the High Street, a blackgabled building, once the town house of the Govans of Cardrona, and still retaining marks of its gentility in the arms carved above the door. A great sign flapped in the wind, bearing on a white ground a gorgeous representation of a winged horse soaring through clouds. The landlord at this time was one Horsbrock, a portly, well-looking man, who claimed to be a connection of the Horsbrocks of that Ilk, and held his chin two inches higher in consequence. The place was famed in all the country round for good wine and comfort.

I stabled my horse, and bidding the host bring me a bottle of Rhenish (so fine a thing it is to have succeeded to lands and money), I went into the low-ceilinged room where the company sat. It was panelled in a darkish wood, and hung round with old rusty weapons—halberds and falchions and what not—which glimmered brightly in the firelight. A narrow window gave it light, but now it sufficed only to show the gray winter dusk coming swiftly on. Around the fire sat some few of the men of Peebles, warming themselves and discussing the landlord's ale and the characters of their neighbours.

They rose to give me welcome when I entered, for my name and family were well known in the countryside.

'It's awfu' weather for man and beast, Laird,' said an old man with a bent back, but still hale and hearty in the face. 'A snawy winter I can abide, and a wet ane; but drizzlin', dreepin', seepin' weather, wi' a wind that take the heart out o' ye, is mair than my patience can stand.'

'You have little need to speak, you folk,' I said, 'living in a well-paved town, with stones beneath your feet and nothing more to do than go round a street-corner all day. Up at Barns, with Tweed swirling in at the yard gate, and the stables flowing like a linn, and the wind playing cantrips day and night in and out of the windows, you might talk.'

'Ay, but, good sirs,' put in a thin voice, which

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came from a little man I had seen at the bowlinggreen, 'ye may thank the Lord for a roof abune your heids and dry claes to put on, when sae many godly folks are hiding like pelicans in the wilderness among the high hills and deep mosses. I bless the Lord that my faither, that sant o' the kirk, is not living in that evil times. He was a man o' a truly great spirit; and had he been alive, I'se warrant he wad hae been awa to join them. He was aye strong on his conscience. "John Look-up" - so the godless called him. "John Look-up," said my mother, "ye'll never be pleased till we're a' joltin' in a cairt to the Grassmarket o' Edinburgh. And a braw sicht ye'll be, hanging there like a hoodie-craw, wi' a' your bairns aside ye." Ay, these were often her words, for she had a sarcastic tongue.'

'Aboot the hill-folk,' said the old man who had first spoken, drinking his ale and turning up the measure to see that no more was left; 'did ye ever hear o' my son Francie and what happened to him when he gaed awa to Moffat wi' 'oo'? He gaed ower by Traquair and keepit the road till he got to Moffat, for he had a horse that wasna ower sure o' its feet on the hills. But when he had it a' sellt, what does he meet in wi' but Wull Hislop, the travelling packman, whae's sair needing a beast. So Francie sells him his horse and comes aff hame walking ower the muirs. He gaed up Moffat Water and ower the muckle hill they ca' Corriefragauns, and got on nane sae bad till he cam' to the awfu' craigs abune Loch Skene. He was walking briskly, thinking o' hame and the siller in his pouch, and how he wad win to Peebles that nicht, when he saw afore him the awfu'est sicht that ever he had seen. It was a man o' maybe the same heicht as himsel', wi' a heid o' red hair, and nae claes to speak o', but just a kind o' clout about his middle. He began to speak in an outlandish voice, and Francie kenned at yince that he maun be yin o' thae Hieland deevils brocht down to hunt up the Whigs. He was for Francie's money, and he oot wi' a big knife and flashed it up and down. But this was no' to Francie's liking. "Put that down, ye ill-looking deevil," says he; "ye'll find I'm nane o' your hill-folk, but an honest man frae Peebles, wi' a nieve as hard as your heid's saft; and if ye dinna let me by I'll put ye in the loch as sure as my name's Francie Trummle." The body understood him brawly, and wi' a grunt slunk aff among the heather; and Francie had nae mair bother wi' him. But oh! it's an awfu' thing to think o' men o' your ain blood hunted and killed wi' thae foreign craturs. It maks me half-mindit to turn Whig mysel'.'

'Dinna fash yoursel', Maister Trummle,' said a younger man, a farmer by his looks; 'ye're better bidin' in peace and quiet at hame. The Lord never meant folk to gang among hills and peat-bogs, unless after sheep. It's clean against the order o' things. But there's yae thing that reconciles me to

this Whig-hunting. They're maistly Wast-country folk, and Wast-country folk are an ill lot, aye shoving their nebs where they're no wantit. There's no' mony Whigs in Tweeddale. Na, na, they're ower canny.'

Master Turnbull made as if he would have answered, when a clatter of feet was heard in the passage and the door opened. Two men entered, one a great swarthy fellow well known for his poaching escapades when the salmon came up the water, and the other Peter Crustcrackit the tailor. They did not enter in company, for Peter swaggered in with as gallant an air as two bent legs and a small body could permit, while the other slunk in with a half-apologetic look, glancing keenly round to see who were the other occupants of the room.

'The "Peg" is honoured with your company tonight, I see,' said Peter, making a bow to me. 'Tis the finest gathering that I remember—the Laird o' Barns, worthy Maister Trumbull, myself, and my honoured freend Maister Simon Doolittle.'

The black-fisher lifted his face from the ale which the landlord had brought. 'Your guid health, gentlemen. I'm prood o' your company, though I'm no' just fit for't, since I'm no' half-an-'oor oot o' the Dookit Pool.'

All eyes were turned to the speaker, and we saw that his clothes hung limp and wet.

'And pray, how did you get there, Maister Doolittle? Was't by the working o' Providence or the wiles o' sinfu' man?'

'A mixture o' baith. I took a bit daunder up Tweed to the Castle Rock to see how the water was rinnin'. It's been raither drumly for fishin' o' late. Ye a' ken the rocks that they're no' exactly the sort o' place that a man wad choose for dancin' a reel in tackety boots. Weel, I was admiring the works o' God as manifested in a big, deep, swirlin' hole, when, afore ever I kenned I was admirin' the hole frae the middle o' it. I was gey near chokit wi' Tweed water; but I wabbled a bit, and syne grippit a birk and held on'

There was a pause, and he took a draught of ale.

'Weel, I roared as loud as I could, and the auld runt whae bides i' the Castle heard me. He cam' doun and askit me what was wrang. "Wrang?" says I. "If ye dinna ca' ten feet o' water and you no' able to soom wrang, I just wis' ye were here yoursel'." So he gangs cannily back and brings anither man to look at me; and the twae thocht for a while, and then each grippit an airm, and after a gey wammlin' I got oot. I was angry at their delay, for I couldna hae held on muckle langer, so I kickit them baith and cam' aff here. I've muckle need o' yill, for I feel as if I had eaten ten pund o' snaw.'

'Come nearer the fire, Simon,' said one, 'Ye're a muckle-tried man.'

'I'm a' that,' said the brown-faced poacher, and relapsed into silence.

The lights were now lit in the streets of Peebles, as we could see by the glimmer through the windows; but in our room no lamp was needed, for the bright firelight was sufficient for a man to read a little book by. The great shadows danced on the wall, bent and crooked into a thousand fantasies: and the men by the fire nodded and spoke little.

The mild-mannered man, him they called John Look-up, was sleeping in his chair, and his jug of ale, which he had emptied, hung limply in his hand. In a little it fell to the floor and rolled beneath his chair; but the sleeper never stirred. The poacher sat shrouded in vapour which the heat of the fire had brought out of his wet garments; and a mingled smell of damp cloth and burning wood filled the room. Silence reigned undisturbed; and I verily believe that in five minutes we should all have been sound asleep had not something occurred to rouse us.

This was no less than the entrance of another guest. The door was flung open, and a man entered swaggering with a great air and bearing into the slumbrous place a breath of the outer world. He was the finest man I had ever seen, two inches and more taller than myself, who am not short, and clean-made as a greyhound. His face was tanned a deep brown and bare save for a yellow moustachio on his upper lip. His hair hung long and fine over his shoulders, setting off the erect poise of his head. He had removed his cloak and hat, and showed a dress of the height of fashion; his cravat was of delicate foreign lace and the sash around his middle of the finest silk. But what I marked especially were his features-the thin, straight nose, the well-bred chin, and the clear eyes; but for a certain weakness in the jaw, I should have called it the handsomest face I had ever seen. More, it was a face that was familiar to me; I had seen the like of it before, but where I could not tell, and I cudgelled my brains to think of it.

'Ah, my faith,' said the stranger, speaking with a foreign accent, 'what have we here? A roomful of sleepy citizens. Or drunk—egad, drunk, I believe.'

And he walked over to where Peter Crustcrackit sat nodding, and stared in his face. Now the noise wakened the rest; and Peter also, sitting up with a stupid air, thought that he was still in the shop, and cried hurriedly: 'What d'ye lack, sir? Silks or satins or plain kersey?' and ran into a recital of his wares.

The new-comer looked at him with an amused smile. 'It is not difficult to tell your profession, my friend: the ninth of a man.'

Then he surveyed the rest of us in turn with his restless eyes, until his look fell upon me. He must have marked something about my appearance distinct from the others, for he bowed and addressed me politely:

'You are not one of these fellows, I think. May I ask the favour of your name? I have been long absent from this country, and have forgot faces.'

'You are welcome to it,' said I. 'They call me John Burnet—of Barns,' I added, for the first time using my new-found title.

He crossed to my side in an instant and held out his hand. 'Your hand, Master Burnet. You and I should be well known to each other, for we shall be near neighbours. You may have heard of Michael Veitch of Dawyck, him that was soldiering abroad. I am that same, returned like the prodigal from far countries.'

Now I knew where I had seen the face before. It was but a coarse and manly counterpart of Marjory's, though I fancied that hers was still the braver and stronger, if all were told.

'I have often heard of you,' I said, 'and I am glad to be the first to bid you welcome to your own country-side. These are some men of the town, honest fellows, who come here for their evening ale.'

'Your health, gentlemen,' he cried, bowing to the company. 'Landlord, bring ale and a bottle of your best Burgundy till I pledge these honest fellows.'

'Eh, sirs,' I heard Peter Crusterackit mutter under his breath, 'sic an invasion o' gentles. The Northgate o' Peebles micht be the High Street o' Embro, for a' the braw folk that are coming to't. I maun think about shifting my shop.'

It would be well on for eight o'clock ere Master Veitch and I left the 'Pegasus' to ride homeward. The night was quieter and milder. and overhead a patch of clear sky showed the stars. He had with him two serving-men, who carried his belongings, but they rode some little distance behind. He was full of questions about Dawyck and his kinsfolk there, and the countryside around; so I must needs tell him something of what had passed between Marjory and myself. He seemed not ill-pleased, and as he grew accustomed to the thought, almost glad. 'What,' he cried, 'little Marjory, who was scarce higher than my knee when I left! To think that she should have grown into a woman already! And you say she is pretty?'

Which question gave me much opportunity for such talk as one must use when he feels the littleness of words.

Then he must ask me about myself, of my father, of whose death he was ignorant, and what I purposed to do. 'For I doubt,' said he, 'that you will have but a dull time of it at Barns in that great desolate house. It little befits an active man to pine at home like a mouse in a cell.'

So from one thing to another, he had me to tell him of all my desires, of how I longed above all things to travel and see the world; and he spoke to me in such a fashion that ere we had come to the ford of Tweed my intention was fixed to ride out like the Spanish Don to see what might befall me.

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THE PATENT OFFICE LIBRARY.

By J. B. C. KERSHAW.

I. THE CONTENTS.



STANCERY LANE, London, is a street so intimately associated, both in name and position, with 'Law,' that those whose knowledge of it is limited to that gained by its use as the shortest and most con-

venient route to other places may be forgiven if they regard it as wholly given up to law stationers, law booksellers, law societies, law insurance corporations, and—lady barbers.

There lies hidden, however, behind the frontage buildings of Chancery Lane, an ugly stone building, with insignificant entrances from two sides, which houses a government department of the greatest importance to the manufacturing arts and industries of our country.

This is Her Majesty's Patent Office, where all business relating to the issue or renewal of patents for inventions is transacted.

Those who connect government offices and buildings with the architectural pretensions of the Colonial and Foreign Offices in Whitehall, will view Her Majesty's Patent Office for the first time with somewhat of a shock. Externally it possesses absolutely no architectural features of any worth; and, even if it possessed such, they would be practically lost, since it lies buried in a mass of office-blocks of buildings that most effectually hide it from view. Of its interior architectural arrangements there is even less to be said that betokens praise; for dark, tunnel-like passages, in which gas-light is most usually required, are striking features of the place. It is therefore comforting to know that this building is doomed and that a structure more in accordance with the importance of this department of the administration is planned to take its place.

To a stranger visiting this building for the first time, the policeman who guards the main stairway, and closely scrutinises each visitor as though he were the dynamiter for whom he has been waiting these many years, and the numerous appliances for fire extinction, may prove to be its most striking interior features. A big fire in this building would be most disastrous; since here are preserved all the documents that establish the priority and validity of patents worth exceedingly large sums of money. Hence the necessity for these safeguards against those forms of outrage in which the anarchists indulged some years ago and against accidental outbreaks of fire. A visitor interested neither in patents nor fire-extinguishers might, having penetrated thus far into this very gloomy building, conclude that it contained little of interest to himself. But let him mount the stairs to the top of the building, and he will be surprised to find a library unequalled in the whole of London in the

range and number of its volumes upon theoretical and applied science. Open daily to the public from 10 A.M. to 10 P.M., it is an immense boon to great numbers of people; and it is, in a sense, selfsupporting, since the cost for maintenance is more than met by the surplus funds arising from the fees for patents. No troublesome formalities are necessary in order to gain access to its treasures. The visitor merely signs his name and address, and is then free to handle and use for reference purposes all the books and papers within its walls. This is such a saving of time and temper to readers that one could wish to see the custom extended to other reference libraries. It presupposes, certainly, a certain standard of honesty amongst the readers which is unfortunately not always attained, and thefts do occasionally occur. These are, however, not by any means so frequent as many might expect in a library open to all classes and types of men; and the greater economy in working such a system possibly balances the expenses entailed in replacing stolen books or journals. The contents of this library may be divided broadly into two groupspatent literature and general science literature.

Are you about to patent some new invention? Here, in a group of rooms devoted to this branch, are copies of all the patents granted in this country since the year 1617; and indexes of all kinds to assist you in your search to find whether you have been forestalled in your invention. The space demanded for this part of the library is rapidly increasing. Each year there is a growing number of patents to be dealt with. In 1870 the number was under four thousand; in 1896 over thirty thousand patents were applied for.

Are you a student of any branch of theoretical or applied science? Here, in the main portion of the library, are rows upon rows of books dealing with the subject of your study. Ranged round the central reading-rooms are bays and smaller reading-rooms, crammed from floor to ceiling with English and foreign books of science or technology. The library contains eighty thousand books; and new volumes are added weekly.

Two large tables are covered thickly with the last issues of the scientific press of Europe and America, and the filed back numbers and bound volumes of this current journalistic literature is one of the most valuable possessions of this library. Over one thousand weekly, monthly, and annual scientific or technical papers and journals are taken; all of which are carefully preserved and ultimately bound. Proceedings of societies of all kinds—engineering, mining, physical, electrical, chemical—of many lands and various tongues, find a place on its shelves; and in these one can read the

original accounts of scientific discoveries or new methods of manufacture which have later been embodied in the text-books of the subject. For, in these latter days of haste and hurry, no man having discovered a new scientific fact or method waits until he has accumulated sufficient of these to justify him in writing a book. The text-books of to-day are merely compilations in handy form of what has already been published through other channels; and in these proceedings and journals of scientific societies we have the fountain-head of the scientific and technical literature of our day.

Are you an engineer, designing some new feature in the mechanism of engines? You will find here the latest books in English, French, or German upon steam and steam-engines.

Are you an electrician, anxious to inform yourself as to the real nature of the power you so easily produce, and which, in your hands, is made to serve mankind in so many various ways? Here are the books of Maxwell and Thomson and Herz, which show how little we can be said to know, and how vast is our ignorance concerning it.

Are you an architect, interested in sanitation? Here is a whole literature of your subject ready to your hand. In short, there is no branch of physical or applied science that is not represented by some of the best and latest English or foreign books upon these shelves; and the mind is staggered when it fully grasps the vast amount of knowledge and research recorded in the pages of the volumes gathered within these walls. We know not how many thousand years man has been upon this earth; but during all these long years he has doubtless been slowly but surely learning to spell out the lessons nature is able and willing to teach him. The actual record of his progress is seen without these walls; but the written record is here, and is destined as the years roll on to become more full and more complete.

II. ITS READERS.

Interesting as the contents of the shelves of this library may be to students of theoretical or applied science, those who regard human nature with an observant eye will find perhaps even greater interest in the study of the human beings who frequent it. Probably no library in London, or the United Kingdom, attracts such a motley crew of readers; the variety being to some extent due to the connection of the library with the Patent Office. All other reference libraries attract only two classes—those who wish to read books and those who wish to write them. This library attracts a third class—the inventors; and these are often far more interesting to the student of humanity, because they include amongst their number many visionaries.

These are the inventors who have been gifted with rather too much imagination; their inventions are impracticable because they forget or ignore some elementary elements of success; they are the poets of this inventors' world, in which ideas must

be transformed into concrete form before they attain success.

An inventor certainly requires imagination, without which he can do nothing; but it is a fatal defect to have too much.

The successful inventors, the men who are ceaselessly at work on problems connected with our manufacturing arts and industries, are not seen here. Such men have either private capital or are financed by wealthy men; and all their business with the Patent Office is transacted through the patent-agents, whose offices abound in this district of London.

England has not yet produced any man so prolific in inventions as Edison; but there are many inventors in this country whose patents are to be numbered by the score, and it is these men who provide the greater number of patent-agents with the business upon which they depend. The clerks and assistants of these patent-agents form one of the largest classes of readers at the library. Many of these spend their whole time in the patent rooms of the library, searching through the files of old patents; when one search is completed they begin a new one, which is to decide, like its predecessor, the validity of some client's latest invention.

It is one of the peculiar, and, as many think, bad features, of Her Majesty's Patent Office procedure that no thorough official search is made to ascertain whether any invention has been forestalled. Thus, unless an inventor makes such a search for himself, or pays a five or ten gninea fee to a patent-agent for having one made, the validity of his patent may always be questioned until it has survived the ordeal of the law courts.

The inventors who are seen here, and who form the most interesting contingent of the frequenters of the library, are the poorer class of inventors, who come to conduct this search for themselves. To these may be added the suspicious ones, who would trust the details of their invention to no one, not even to a patent-agent, until it has been fully protected. These men are easily distinguished. Many of them are from the country, and lack the ease and self-confidence of the true Londoner. Most of them are visiting the library for the first time. and require much assistance from the librarians before they understand where to look and how to search for what they want to find. There is an eagerness and alertness in the manner of all which betrays nervous tension. They have often thought for years over some problem or difficulty that has presented itself to them in the course of their everyday labour or duties. They have perhaps spent hardly-earned money and all their leisure hours in experiments; and time after time have they failed to achieve what they desired. But at last, perseverance has been rewarded; and their invention, upon which so much time and thought and money has been expended, seems to possess all the merits of novelty and feasibility which command success. Every inventor who arrives at this stage has dreams She in the she is the

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of wealth which only very seldom realise themselves in hard cash. Not one patent in one hundred is of any great value; and of these valuable ones not one in ten brings a fortune to the man in whose brain it originated. Patents demand money as well as brains, in most cases, before they assume very practical form, or before they are sufficiently developed to be sold for large sums of money; and, as is so often the case, it is the financier and not the inventor who reaps the harvest of reward.

To return, however, to our poor inventor. If he is not entirely ignorant of patent procedure he knows that the Patent Office makes no search to test the validity of his invention; and so he comes to undertake it himself. If he finds that his invention appears in no previous patent, he is confirmed in his belief that he will at last see his dreams realised, and that he will in a short time possess great wealth. If, on the other hand, he finds his ideas have been anticipated, his dreams of fortune fade away like mist before the morning sun; and life, as he has known it for so many weary years -hard, toilsome, pitiless to those who, like himself, lack money—lies painfully clear before his view. A short three hours-or even less-spent in this library may plunge the man who entered it hopeful and bright into deepest despair; and it is certain that within its walls many silent tragedies of this kind are enacted week by week, and noticed by only few, if any, of those around. But inventors are a hopeful race, and though some who suffer such a disappointment of all their hopes may never recover from it, there is no doubt many recommence their experiments and elaborate other inventions from which they expect the same, or even greater, realities of wealth and happiness.

Another class of readers who frequent the library are those who come solely for purposes of study. These are attracted by the range and number of the volumes it contains dealing with science in all its branches. Many students of science do not know of its existence. Those who do are frequent visitors, and appreciate fully the advantages they possess in the perfect freedom of reference to all the books upon its shelves. Here you see a student from one of the London technical schools or science colleges reading up some special points of difficulty that may have arisen in connection with his studies. There is a young fellow, who has just returned from the goldfields of South Africa, deep in the latest treatises upon gold-mining and metallurgy. Men who are writing text-books, or less important literature, are to be found here as students, obtaining matter for their yet unwritten productions at those fountain-heads of scientific literature—the proceedings and journals of scientific societies.

The current literature with which the tables of this library are so lavishly endowed also attracts a very large number of readers connected either by profession or in the way of business with the sciences, or applications in arts or industries, with

which these papers and magazines deal.

A man must be an unusually good linguist to reap the fullest benefit from this library. English. French, and German are essential: since it is the peoples of these three tongues who lead the world in science and in the manufacturing arts and industries. But books and papers and journals in Italian, Russian, and Scandinavian are also to be found; and thus a knowledge of practically all the languages of Europe is the chief qualification for him who would make the most of his opportunities here.

There are few English students of science or technology who possess such linguistic knowledge; and the majority of readers here confine themselves to the literature in their own tongue. But a considerable proportion do avail themselves of the foreign books and papers; and doubtless the greater attention now being paid to the teaching of at least two modern languages to science students will lead to greater use of the works of foreign origin in this library as the years pass on.

THE BULLY OF HAIPHONG.

PART III. - CONCLUSION.



T was an awkward moment for both. particularly for the man who had the use of his tongue. He did the best he could, however; and, after he had explained matters a little, busied himself in an attempt to

reduce the room to something like order. By the time he had finished, the Annamite boy had returned with the package from the doctor, and it was necessary to cook something for the sick man. In this way Duchesne found himself kept busy until durkness fell; and for the same reason it was not until he had himself partaken of a

wretchedly inadequate evening meal, cooked by the native boy, and had made his patient comfortable for the night, that he had leisure to appreciate the strange position in which he was placed.

As a matter of fact, his lot for the following week was by no means an enviable one. His patient was at first incapable of anything; afterwards, when he could talk, he was by turns morose and aggressive. As for any gratitude to the man who in reality had saved his life, he showed none; if he felt any he managed to conceal it very effectually. Upon Duchesne, however, when the young man had in a great measure become accustomed to his position, this exercised little or no effect. At first he did not care very much whether he won the old man's liking or not. His one aim and idea was to help him to recover from the wound he had inflicted upon him. But, strange though it may seem to say so, in spite of the other's sullen temper, or, at other times, in spite of his outbreaks of ferocity, he found himself being drawn in some inexplicable fashion towards him. There was something about the old man that appealed to him—a loneliness, a peculiar association with some dim and almost forgotten past that was as difficult to analyse as the reasons that gave rise to it.

With Desrolles the case was in its effect rather similar, though widely different in the means by which he arrived at it. To his surprise, he found himself after a while liking to have the young fellow about, and beginning to dread the day when it would become necessary for him to leave. It is possible he knew that when the other was gone he would never find an audience who would listen so patiently when he embarked on his tirades against the government; no one who would pay such attention while he gave utterance to his utterly irrational plans for altering the existing order of things, and for restoring France to her old fame as a monarchy. Had he been taxed with it he would probably have denied the assertion with a fine flow of language, and have even been prepared to prove as much at the point of the sword. But in his heart there was without doubt a small spark of gratitude, and, if the truth must be told, also of shame. Not once, but times out of number, he had tried conclusions with other men in the same way and had never suffered defeat. More than once his victims had been young men, and when they had died the authorities had been foolish enough to attempt to make trouble for him. Now he had been beaten, and badly beaten too, by a boy whom he had boasted he would crush between his finger and thumb. He could not understand how it was that he had been defeated; but he felt sure that if the duel were to take place again he could reverse the position of affairs. Only let him get well once more, and he would spit him like a pigeon. But as this thought came into his mind the young man entered the room, bringing the bowl of broth he had been preparing. As he came over Desrolles looked up at him. On second thoughts, he was not quite sure that he would carry out his threat. The young man was not a bad sort of fellow; he had pluck at any rate, and that was something, he told himself, in these degenerate days. Consequently he took the bowl almost savagely from his nurse's hand, and having tasted what it contained, busied himself for the next few minutes grumbling at its poorness. Duchesne smiled, but did not contradict him. He knew his man by this time, and could make allowances for his little ebullitions.

Seven days later the doctor announced that the

old man was well enough not to require a nurse any longer. He informed him of this fact, and was bidden peremptorily to mind his own business. Consequently he left the house in a rage, and encountered the younger man, who had been into the town, on his homeward route.

'You really think he can safely be left?' inquired the latter when the other had told him the decision he had arrived at.

'He is as safe as he ever has been in his life,' replied the doctor; 'and, if you will allow me to say so, it is all due to your careful nursing. You needn't be afraid that you'll be thanked for it, however. He hasn't an ounce of gratitude in his constitution. As likely as not as soon as you have left him he will find another cause for a quarrel, and be sending you a second challenge before you can clear out of the country. By the way, have you discovered any news of that lost relative of whom you spoke to me?'

'Not a word. I cannot find any traces of him. But then that is scarcely to be wondered at, for it is pretty plain to me now that he must have lived here under an assumed name.'

'But how do you know that he lived here at all? Might he not be in Hanoi?'

'It is possible, of course; but he wrote to my father from Haiphong many years ago. It is very strange that I can hear nothing of him, for I have made all sorts of inquiries of all sorts of people.'

'You deserve better fortune,' said the doctor, 'in return for your goodness to that old curmudgeon youder. If I can be of any assistance to you I trust and hope you will command me.'

Duchesne thanked him for his courtesy, and went on along the jungle-path until he came to Desrolles's 'go-down.'

He found the owner seated in the veranda reading a tattered old Parisian newspaper. He had by this time quite resumed his old style of living and also his old fashion in dress. With it had come back all his former love of sarcasm, and that haughty, insolent manner which had caused him to be hated and feared in the settlement for so many years.

Duchesne went up the steps, and, after commenting upon the heat, seated himself beside him.

'I regret to inform you,' he said, 'that it will be necessary for me to leave you to-morrow morning. The doctor has told me that there is no longer any necessity for me to intrude my presence upon you.'

'The doctor is a meddlesome fool,' answered Desrolles hotly; 'and I shall take the earliest opportunity of telling him so. But of course it is natural you should desire to leave me. This place is not fit for the accommodation of a pig, much less a man. It is my misfortune that, after the services you have rendered me, I am unable to make you some better return; but in this cursed country the wise man does not look for any reward. Personally I have long ceased to do so.'

'I do not desire one,' said Duchesne simply.

'In that case you are even more singular than usual,' the other replied. 'In my time I have met many men, but never one who did a kindness for another and did not expect to get something back.'

'I fear you have a poor opinion of your fellowmen.'

'The very poorest possible,' he answered candidly; 'and small wonder. But there—that doesn't affect the matter at issue. Why must you leave me?'

'Because I have my work to do,' answered the youth, 'and my time is limited.'

'I think I understood you to say on the day'—
here Desrolles paused for an instant, and the old
nasty look came back into his face at the recollection—'well, on the day of my accident, that
you had come to Tonking in the hope of discovering traces of a missing relative.'

'That is so,' said Duchesne. 'I came out here to find an uncle who disappeared from France twenty-five years ago. So far my search has been quite without success. If the man in question came here he must have changed his name at once, and afterwards have disappeared without leaving a single trace of his whereabouts.'

'In this country a man may disappear at a moment's notice,' returned Desrolles. 'It would be impossible to find a more convenient place. But tell me more about this uncle of yours. It is just possible I may be able to help you. Remember, I am one of the oldest inhabitants of the country. I was here with Garnier in seventy-three, and have never been out of it since. If your relative spent any time in the colony, it is a franc to a centime I shall remember him.'

This aspect of the affair had never struck Duchesne, and he hastened to make the best possible use of it.

'He was the Count de Clairvaux.'

Desrolles thought for a few moments and then shook his head.

'I know nothing of him under that name,' he said; 'but, as you said just now, he is almost certain to have changed it for another. Titles are not of much account here.'

He paused again for a few moments.

'You say he was your uncle? On your mother's side of course, since your name is Duchesne?'

'I'm afraid in a certain sense I misled you. He was my father's eldest brother.'

Desrolles gave an involuntary start.

'Your father's eldest brother?' he cried. 'Do you mean to tell me you are a De Clairvaux?'

'That is my real name,' said the youth. 'But why does it excite you so? Are you acquainted with the family?'

'By repute, of course,' the other answered. 'Who is not? But why do you deceive me? I thought you called yourself Duchesne?'

'I do,' the young man replied, a slight colour

rising in his face. 'It was only a year ago that I learned it was not our real name.'

'For what reason did he adopt it?'

'If you knew anything of Raoul de Clairvaux's life and the circumstances which eventually drove him out of France you would not ask that question.'

Although it was evident that he tried hard to prevent it, Desrolles's face grew black as thunder.

'Pardieu, young man! he may not have been all you say—he had his excuses.'

Duchesne gazed at him in blank amazement.

'What do you mean?' he asked. 'How do you know that he had excuses?'

Desrolles, however, had recovered his composure by this time.

'I don't know it,' he answered hastily. 'I am only judging his case by many others. But tell me more. You say your father changed his name. Perhaps he stepped into his brother's shoes?'

'There were no shoes left to step into,' said the young man. 'My uncle squandered his entire fortune; and my father, who was the soul of honour, surrendered his own private means to pay his debts. The year following he married my mother on what little was left, and settled himself in Rouen, where he died four years later, leaving his widow and her two children totally unprovided for. Can you wonder that we do not reverence the name of Raoul de Clairvaux?'

He paused, and during the interval Desrolles rose and walked a little way up the veranda. When he returned Duchesne thought he could see traces of tears in his eyes.

'Your story is most affecting,' he said. 'And pray, how did you all live after—after—well, after your father's death?'

'As best we could,' replied the young man; 'thanks to a brave mother, who worked her fingers to the bone to keep and educate us. My mother's case was the more sad because I have good reason to feel certain her marriage with my father had been a family arrangement—she herself loving the man whose wickedness had driven him out of France. But you look pale. What is the matter? Are you feeling ill?'

'Nothing. It is nothing,' cried Desrolles, turning his face away. 'Only a passing twinge—that is all. I shall be better in a moment.'

Both were silent for a few moments, each occupied with his own thoughts. Then Desrolles gave a little preliminary cough.

'And what is your object now in trying to find this mauvais sujet?' he asked.

'Cannot you guess?' asked Duchesne. 'Why, six months ago he became the heir to a magnificent property and as fine an income as any man can boast in France.'

'Good heavens! This is very interesting. And, pray, who left it to him?'

'An old aunt who could surely never have heard of his misdeeds.'

'And if he is not to be found—or is dead—what then?'

'It all passes to my sister and myself as the nextof-kin. If he is dead we shall be richer than we ever dreamed of.'

'But you will have to prove his death, will you not?'

'That is why I am here. Monsieur Desrolles, you can have no idea what his death will mean to us. If I can prove beyond a shadow of a doubt that the man no longer lives, I shall be Count de Clairvaux; my mother will dwell with me in the old house where our race have lived for the last five hundred years; my sister, who loves a poor but good man, will have a dowry that will enable them to marry and achieve their hearts' ambition; and then I shall be able to wed the girl to whom I am betrothed, and whom I love better than life itself. And to think that all our happiness should be dependent on the life of a man who has never been known to do a good deed since he was born!'

'You speak straight, my young friend. And what if he lives?'

'In that case I shall tell him what I have discovered. He will then be able to return to France and resume his old career of shame.'

'And by so doing he will deprive your mother, your sister, to say nothing of yourself, of the wealth you speak of, and the happiness you would all find in it. Do you mean that you would be as quixotic as that?'

'Why not? If he is alive the money is his —not ours. We have no sort of right to it.'

'But surely to a clever man it would not be difficult to find the proof you require. There are hundreds of men in this colony who, for a reward, would swear they were present at his death. Have you thought of that?'

Duchesne rose from his seat and said haughtily: 'I do not know such men, monsieur.'

'I beg your pardon,' answered Desrolles, with a meekness that was far from being usual with him. 'I had no desire to offend you. I only wish that it were possible for me to assist you to find the man you want. But as you do not know under what name he passed out here, and I have no idea what he was like, I'm afraid I cannot help you. You have no photo of him, I suppose?'

'That I have,' replied Duchesne, as he produced a leather pocket-book, which he opened. 'It is the only one we could obtain, and it was taken in Paris in the year sixty. Photography was not as perfect as it is now, but my mother declares it to be a good likeness as he was at the time.'

Descolles took the picture and glanced at it for a few seconds. Then he handed it back, saying as he did so:

'No, I'm afraid I cannot help you.'

Duchesne gave a little sigh as he replaced the photograph in his pocket.

'It is like looking for a needle in a bundle of hay,' he said. 'However, for my mother's sake, I

will not give in. It would break their hearts if I were to come home empty-handed. They worked so hard to help me to find the money to undertake the journey that Heaven surely could not let it be altogether fruitless. It would be better to find the man himself.'

At this juncture Desrolles made an excuse and went into the house. For the remainder of the day he was strangely silent. It was plain that he had something on his mind. After the evening meal he sat in the veranda smoking cigarette after cigarette, the very essence of ill-humour. Towards ten o'clock, however, he seemed to have made up his mind; and when the young man had gone to bed and was asleep, he rose and went to an old native chest standing in the corner of the room, where he began searching for something among its contents. Having found what he wanted, he glanced at the bed where Duchesne was sleeping peacefully, and donned his hat. A moment later he had left the house and was making his way as fast as he could go through the jungle towards the town. As he walked he talked to himself in a fashion that had long since become familiar to him; and a bystander, had there been one near enough, might have heard him mutter something to the following effect:

'The lad says she loved me. Ah! who should know that better than I? And all these years she has led a life of poverty when, but for my sin, she might have had so much. But I can make amends to her now. Thank God I can make amends, and, what is better, without her knowing it. And for me—what? This money that has been left is mine. With it I could get out of this hell and lead the old life once more. But there, what would it benefit me? By this time all those who knew me will be dead. And she must be considered. She loved me once; perhaps she even loves me a little now. No, no! If it can be done they shall have it all.'

After a quarter of an hour's walking he entered the town and made his way towards the house where dwelt the man he desired to see. Ascending the steps into the veranda, he knocked upon the door.

Who is there?' a voice inquired from within.

'It is I—Desrolles,' answered the man outside. 'I must see you at once. I have business of the utmost importance with you.'

'Monsieur Desrolles?' said the householder, as he opened the door to admit the man of whom he stood in such awe. 'Come inside, mon ami, and tell me to what happy chance I am to attribute the honour of his late visit?'

Describes did as he was desired, and having been ushered into the other's sitting-room, sat down, placing a small packet of papers on the table as he did so.

'Forgetful as the world is in such matters, perhaps you still remember our dear Despard,' he began as soon as the other had scated himself—'poor Despard, who died three years ago of fever?'

'Of course I recollect him,' replied the other.

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'How could it be otherwise? Was he not my best friend? We lived in this house together.'

'That was so,' said Desrolles. 'Now, tell me if it did not ever occur to you at one time that he must have been a great man in France?'

'It is possible,' said the little man. 'But, at the

same time. I'-

'It is quite certain that he was,' corrected Desrolles; and then added with conviction, 'he repeatedly told me so. I knew it from the first. He was the Count de Clairvaux.'

'The Count de Clairvaux! How could that

be? I thought he was'-

'Never mind what you thought,' broke in Desrolles; 'that has nothing whatever to do with it. If you do not believe me, let me tell you that when he died he gave me certain letters—here they are —which conclusively prove what I say to be true. You may examine them for yourself.'

The other untied the packet, and one by one read the faded, musty letters it contained.

'These are certainly letters to the Count you mention. But'—

'I do not want any "buts," said Desrolles imperiously. 'I tell you the man was Count de Clairvaux. He told me so, and I always suspected it. If he were not, why should he have these letters? In what year did he come to Tonking? Answer me that.'

'In 1873,' replied the other.

'Very good. So did the Count, as I am in a position to prove.'

But you do not really believe that our friend

Despard was'-

'Mon ami, I do not say I believe anything. I simply assert that Despard was the Count de Clairvaux. On this point I am not to be moved. If you doubt my word you insult me, and I will send my friend Carniac to wait upon you to-morrow morning. You know my reputation, I think.'

The other changed front immediately.

'I do not doubt what you say for a moment,' he hastened to explain. 'If you assert that he gave you these letters, I am convinced of his identity.'

'That is good. I am delighted to hear that you are reasonable. In that case you would, of course, be prepared to swear that he left those letters in your care?'

But he did not!'

'Sapristi 1 Am I to understand that you'—

Do you mean that I am to say that Despard left these letters with me when he was dying?'

'Exactly, when he was dying. The fact of the matter is, there is a young man in Haiphong just now who is the Count's heir. If De Clairvaux is dead he inherits everything. They—his mother, his sister, and himself—have been in abject poverty for years, and now a windfall has come to De Clairvaux, which will pass to them on his death. Now, I happen to know that De Clairvaux is dead.'

The other scratched his chin and looked at Desrolles out of his sharp eyes.

'I think I understand,' he said at length. 'You, yourself, are De Clairvaux, and you want to help this young man.'

'My name is Desrolles,' broke in the old man, bringing his hand down on the table with a burst of fury. 'But I want this young man, in whom I take an interest, to understand that his uncle is dead—but not through me. Do you understand? You must hand him these letters which were left you by our friend Despard, and if necessary tell him, what is quite true, that the latter died in your arms, leaving these papers with you. Such an action cannot prejudice you at all. If you do not care to serve me'—

'Pardon me,' said the other. 'I will serve you with great pleasure. Let it remain as you say. Send your young friend to me, and I will talk to him'

Next morning Desrolles greeted Duchesne with

a smiling face,

'Bon jour, mon ami,' he said; 'I have an idea for you. I have been thinking over what you told me last night, and have come to the conclusion that I do know something of the man of whom you told me. If I mistake not, he passed here under the name of Despard. At any rate there is an old fellow living in the town yonder by the name of Dupré, with whom he was on intimate terms, and in whose house he lived for some considerable time, even if he did not die there. I do not say so authoritatively, but I think it is just possible that this Despard and the man you seek might be one and the same person. At any rate there can be no harm in your going there to inquire.'

Duchesne did as he was advised, and an hour later returned to the bungalow nearly beside him-

self with joy.

'Oh, how can I thank you for the advice you gave me?' he cried in an ecstasy. 'There can be no doubt that the man you knew as Despard was my uncle, the Count de Clairvaux. I have the letters and papers he left with his friend to prove it. I have also the certificate of the doctor who attended him on his deathbed, and of the clergyman who performed the ceremony at his burial. I cannot make you believe how grateful I am to you. On Thursday next I return to France with my news. Thank God, my mother and sister are now provided for, and my journey has not been in vain after all.'

'I offer you my felicitations,' said Desrolles, but with an effort. 'I trust this new-found prosperity may prove a blessing to you.'

'God grant it may,' answered the young man devoutly.

'So our old friend Despard proved after all to be what he pretended—an aristocrat,' said one functionary to another on the Thursday following—the same day, indeed, that the young man whom they

had known as Duchesne bade the Colony of Tonking farewell.

Well, well! it shows how mistaken we are all liable to be,' returned the other. 'Now, if you, my dear Desrolles, had been found to be a noble seigneur I should not have been surprised. You have the grand manner.'

'That shows again how easily one may be mistaken,' said Desrolles. 'I am nothing in the world—literally nothing, and I am not going to pretend

to be more.'

'You are unusually modest to-day, mon ami,' said the other. 'Pray, furnish us with the reason.'

'I am suffering from the effects of a charitable action,' replied Desrolles, 'and it irritates me.' Then, with a bow, he left his friends and made his way through the jungle towards his own desolate abode. Reaching it, he stood in the veranda and looked for some moments at the sun, which was fast disappearing behind the jungle trees.

'She loved me,' he said to himself, very slowly; 'she loved me!'

Meanwhile the mail-boat was steaming across the sunlit seas, carrying with her the young man who had arrived Henri Duchesne, and was returning Count de Clairvaux.

Scarcely a day passed but he thought of the man he had left behind him, and when he reached home he brought tears into his mother's eyes with his description of that rugged old duellist whom he had tamed by kindness.

'Poor Desrolles,' he said; 'I wish I could have persuaded him to accompany me. I tried, but he would not hear of it. "Here I have lived, and here I shall die," he said. And I believe he means it. However, we will never forget the help he gave us; will we, dearest? For, remember, had it not been for him, it is just possible I should never have heard of my good fortune.'

Little did he guess how near he was to the truth.

WOOD-PIGEON SHOOTING OVER DECOYS.



HEN the season for partridge and pheasant has closed, but the wintry February weather or cold winds of early March still debar sportsmen from entering upon the delights of spring sports, the guns are often

laid aside with great reluctance, for men feel that hunting alone is a poor substitute for the varied pursuits of the winter months. As a matter of fact, however, though game is out of season, there is no reason why excellent, if unaristocratic, shooting should not be enjoyed for some weeks longer by any who care to brave the exposure necessary to obtain a good day's wood-pigeon shooting.

All through the winter huge flocks of woodpigeons frequent the large woods of the southern counties of England, which, as the weather becomes warmer, break up, a few birds remaining to breed, but the majority returning to their northern homes once more till the approach of winter shall again drive them south in search of food. In the early days of winter these flocks of pigeons finished off the acorns that the pheasants had left, and attended the late-sown fields of wheat and beans. Nor, when the snow fell, were they averse to making a meal of the green tops of turnips that showed above the white covering and afforded sustenance for all the half-frozen denizens of the woods and fields; then away to the early young clovers, picking out the 'eyes' of the little plants and doing incalculable damage to the growing crop, until they finally dispersed for the summer season.

At all these times, and in all these places, it is quite possible for a sportsman to make a bag

of the birds if he set about it in the right way, though the pigeons are most accessible when feeding on the turnips. Still, that fare sadly spoils their flavour; besides, there are, I imagine, few men who care to risk their health for the sake of shooting wood-pigeons from a snowy retreat in a ditch. However, although, as we have said, they are more accessible then than at any other time, those who know how to set about it can make a very fair bag of them at any season if only they can find their feeding-ground; for wood-pigeons, when once they have chosen a field or spot, will not lightly give up attending it, and unless some unforeseen change in the weather takes place, the sportsman can rely upon the regularity of their movements.

Of course, the first thing to do on reaching the feeding-ground is to select the most suitable site for a hut from which to shoot, and a great deal depends upon the choice of a fitting place; for, unless it be carefully chosen, the sportsman as likely as not will have the chagrin of watching the birds feeding in another part of the field or alighting on favoured trees just out of gun-shot. It is not a difficult thing, however, to choose the right place, for there is generally some especially tall tree or spinny which marks the most favoured haunt of the birds.

The sportsman's next care is to construct his hut; but although we use this term as being the one most generally applied to the artificial structure which conceals the gunner, it must not be inferred that his place of concealment in any way resembles what we are accustomed to associate with the meaning of the word. Indeed, although

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his 'hide' must be effectual and complete, there must not be the slightest approach to a building, and when it is finished the holly, gorse, broom, grass, brakes, or oak boughs of which it is composed must harmonise so entirely with the surrounding bushes or fence that not even these wariest of birds shall be able to detect a sign of anything unnatural. A good plan is to shape a rough framework with strong boughs first, and then, when these are so arranged as to give the occupant room to shoot without showing himself, to cut away every twig that is not absolutely essential, and finally to interweave the structure with whatever material may be most natural to the surroundings until all similarity to a hut has been destroyed, and the place appears part of the fence in which it is made. The hut should have no door, and, if possible, the means of ingress should be along the ditch, with a large bough ready to hand to cover the spot when the sportsman has gone within.

But all these preparations are of little avail without proper decoys; and though there is a great deal of skill to be acquired in the making of a hut, it is as nothing compared with that which can be attained to in the working of the decoys. The clumsy blocks of wood rudely carved and coloured to represent a wood-pigeon which are sold by gunmakers may be of some assistance in a covert (personally, we never found them so); in the open they are absolutely useless. Nor are tame pigeons much better; and if the shooter cannot get real decoys he had much better use dead or stuffed wood-pigeons, although even with these he will not be able to effect much compared with what a clever hand can do with live decoy-birds if these be well trained. Woodpigeons, if taken young, can be very easily reared by hand, and become so tame that they will. freely feed from the hand or mouth of their master; but great care must be exercised to prevent their being frightened by strangers, or their training will be put back, and birds once made shy are very slow to become tame again. If, however, they are successfully tamed and gently handled they will prove most amiable pets, and can be kept in captivity for years.

For use as decoys they should be properly braced with some soft material, care being taken not to graze the skin nor to fasten the brace too tightly and prevent their breathing. The braced birds should be taken to the shooting-ground in a suitable partitioned box or basket, and then placed on 'pulley irons' similar to the 'coy-sticks of the bird-catchers, though, of course, proportionately stronger. They are placed at a distance of from twenty-five to thirty yards from the hut (or even more if the birds be very shy), and a string keeps them in communication with the occupant of the hut, who, on seeing a flock of pigeons approach, works his decoys precisely as a bird-scatcher would do, leaving off the instant

his quarry observes his decoy-birds, as the wild pigeons will then assuredly make for them, and while circling round give the sportsman his opportunity for shooting.

The precise moment that the gunner should fire must be left to his discretion, though, on the one hand, he should wait until the birds are well within reach, and flying away from his hut rather than towards it; and, on the other hand, he must take care lest by waiting too long he loses a shot altogether by the birds settling down out of reach, for it is but rarely that wood-pigeons will alight near a fence or ditch. A good deal of practice is necessary for even a crack shot to get accustomed to the somewhat embarrassing and cramped position; but there is a knack that can be learnt in this as in every other kind of shooting, and when once acquired the sport becomes an exceedingly fascinating one. All the accompaniments are so different to what one generally finds when shooting in this country that the very novelty of the thing has a charm of its own. Then, too, there are few prettier sights than that of a flock of pigeons wheeling round or pitching above one's head to the musical whistling of their wings; and no one could help being fascinated by the work when once the initial difficulties of constructing the hut and working the decoys have been mastered.

Wood-pigeons are proverbially difficult to kill, so that a good gun and a straight aim are very necessary, unless one is content to see one's game go away time after time hard hit, but good for a mile or so before falling. Unless hit in the head or wing it is an astonishing thing to see how much shot a wood-pigeon will carry away, and it is wise to 'mark' every bird that goes away hit, for they will often settle on a tree hard by, to fall dead a few minutes later.

But besides the wood-pigeons or ringdoves proper, there are, in some counties, flocks of the smaller kind-stockdoves, as they are called. These generally feed and associate with the ringdoves during the winter, and can be killed in precisely similar fashion; but though their flight is far swifter than that of the ringdoves, they are much more easily killed and afford better sport, as they are more persistent than their larger cousins, and if the sportsman remain out of sight will return to his hut time after time during the same day. There is one curious thing that it is well to remember, however, in connection with these plucky little fellows, and that is, that although they may be decoyed with a ringdove on the puller, it is quite out of the question to decoy a ringdove with a stockdove on the iron; so that it is best to be provided with both kinds if possible, though ringdoves only will do very well if the others are not available. Indeed, it is not difficult to decoy the stockdoves with a tame pigeon from the cote if no better decoy be forthcoming and one happens to have one of the right

colour, for of course a fancy-coloured bird would be worse than useless.

Wood-pigeons are very regular in their hours of feeding, though these vary with the time of year. But in the winter when one shoots them it is a fairly safe rule to reach the ground in sufficient time to have all ready for them by half-past eight in the morning, as it is important not to disturb them to make the hut and thus

show one's self in the neighbourhood; it is not often much use waiting after three o'clock in the afternoon. For those who love to be alone with Nature and to pit themselves without the attendant crowd of keepers and beaters against the wildest and wariest of British birds, there are many far less profitable ways of spending time than in having a day after the woodpigeons.

A FAMOUS DUELLIST.



NE of the most notorious of French duellists at the period of the restoration of the Bourbons in 1815, when scarcely a day passed without a hostile meeting, was the Count de Larilliere, a native of

Bordeaux. At that time he was a man of about thirty-five—tall, well made, and with polished manners. His appearance, indeed, utterly belied the recklessness of his disposition.

One day, as he was walking with a friend in the principal street of Bordeaux, he saw approaching them one of the richest and most respected merchants of the town, with his newly-married wife on his arm. Larilliere advanced towards them, hat in hand, with all the outward semblance of a well-bred man, about to make a speech of more than ordinary politeness.

'I beg your pardon,' said he, addressing himself to the merchant, who, with his wife, had halted abruptly, 'but I have just made a bet with my friend, whom I have the honour of presenting to you'—here he introduced his friend in due form—'that I will kiss your wife on your arm'—the merchant, knowing the Count's character and reputation, here became deathly pale—'after having first given you a box on the ear.'

Saying this, the miscreant stared impudently in the face of the amazed merchant, and in spite of all the resistance he could offer, put both threats into immediate execution. A challenge and a meeting followed, which resulted in the injured party receiving his death-wound, and the aggressor going forth in search of new victims.

In course of time Larilliere had fought upwards of forty duels, and was able to boast of having killed no fewer than eleven individuals. He was now bent upon making up his dozen, after which he proposed to rest, and continue his practice with the new cavalry sabre, to which he had taken a strong fancy. This laudable desire was not destined to be realised, however, for he was himself killed in a duel, under strange circumstances, a few days after the death of his eleventh and last victim.

On the evening of a masked ball at the Grand Theatre at Bordeaux, Larilliere was seated in the adjoining café. It was about eleven o'clock, and the Count, not being in a very quarrelsome humour, was occupied in peacefully imbibing a glass of punch. Suddenly a tall young man, wearing a black domino and black-velvet mask, entered the room, and strode up to the table at which the formidable Count was seated.

No particular notice was taken of the newcomer at first; but no sooner was he observed to be in the close vicinity of Larilliere's table than all eyes were attracted towards him. Without a single preliminary observation, he seized hold of the Count's glass, threw away the punch it contained, and ordered the waiter in a loud voice to bring a small bottle of orgent in its place.

Witnesses of the scene say that at this moment, for the first time in their lives, they saw that Larilliere had turned pale. It was the common belief in Bordeaux that during all the years this man had been applying himself to the work of destruction he had never once allowed his countenance to betray the slightest emotion.

'Scoundrel!' he exclaimed, 'you do not know who I am,' at the same time making a vigorous but unsuccessful effort to remove the stranger's mask.

'I know who you are perfectly well,' the other replied coldly, forcing Larilliere violently back into his seat.

All present started to their feet, and, without venturing to interfere, anxiously waited the issue of this strange provocation.

'Waiter,' exclaimed the stranger, 'be quick with that bottle of orgent!'

At this second command the bottle was brought, and the masked man, drawing a pistol from his pocket, proceeded to address his adversary thus:

'Unless in the presence of this company, and for my own personal satisfaction, you at once swallow this glass of orgeat, I will blow your brains out with less compunction than I would those of a dog. Should you, however, comply with my bidding, I will do you the honour of fighting you to-morrow morning.'

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no no et 'With the sabre?' demanded Larilliere, convulsed with rage.

'With what weapon you please,' replied the stranger disdainfully.

Whereupon the Count swallowed the orgeat, every one present preserving a death-like silence.

The masked man, satisfied with the result, now retired, saying in a voice loud enough to be heard by all in the room:

'To-day I have humbled you sufficiently; tomorrow I intend to take your life. My seconds will wait upon you at eight o'clock in the morning. We will fight on the spot where you killed the young Chevalier de C——.' This was the name of the Count's last victim.

The following morning Larilliere found himself in the presence of a man, no longer wearing a mask, who appeared to be some five-and-twenty years old, and of a calm and dignified but singularly resolute bearing. His seconds were two private soldiers belonging to one of the regiments of the garrison. They brought weapons with them, but Larilliere's seconds took exception to them, at which a scarcely perceptible smile passed over the stranger's face.

On taking his position, Larilliere turned to his

seconds and said in a low tone:

'For once I believe I have found my equal.'

The combat commenced; and at the first passes the Count was convinced that he had to deal with a skilful antagonist. However, his courage did not fail him, though at times he seemed to lose somewhat of his customary composure. Lunges and parryings succeeded each other with rapidity on both sides. Larilliere had already tried his usually fatal finishing-thrust more than once, but each time only to find his effort turned aside by his adversary's blade.

Harassed at finding his efforts unavailing, he insolently remarked to his opponent:

'Well, sir, at what hour do you intend to kill me?'

A momentary silence ensued. Then the stranger, who seemed to have profited by that slight interval to assure himself that the advantage lay decidedly with him, quietly remarked:

'Immediately !'

Rushing forward, he thrust the point of his sword through his adversary, who sprang backwards, tottered, and sank into the arms of his nearest second.

Putting his right hand on the wound, the Count was just able to say:

'That, sir, is not a sabre cut; it is a thrust with the point. With the sabre I feared no one;' and in a few moments he fell back dead.

The stranger now advanced politely towards the seconds of the man he had slain, and inquired if he was at liberty to depart.

'Will you at least tell us your name?' they asked in reply.

Larilliere's opponent proved to be one of the

young officers of Blaye, who had determined to avenge the murder, as he considered it, of the Count's last victim. When the fact of Larilliere's death became generally known in Bordeaux many mothers of families actually had masses said, in thankfulness for having been delivered from so dreaded a scourge.

THE EVE OF HER WEDDING.

Hush! Let me hide my happiness, A little while let grief hold sway, And sweetness blend with bitterness, Before I give myself away.

Soon, soon, must pass for evermore

The scenes of old; new paths I choose;

Oh let me count my treasures o'er,

That winning love's delights I lose.

Dear home! How all its nooks and trees Recall my childhood's joys and tears, Mixed with immortal memories Of twenty tranquil transient years!

Familiar sounds of birds and bees
On summer evenings fair and still,
Set to the music of the breeze,
Or twilight tinkling of the rill.

O babbling brook, O darling glade, Old church beside thine ancient yew, Where oft my childish feet have strayed, I bid you all a last adieu!

Dear simple souls, so staunch and true, In cottage homes o'er hill and dell, A distant home is mine; to you And yours I bid a last farewell!

A last farewell! Though all appear Part of my very being's whole, Linked with my whole life's sojourn here, Knit to each fibre of my soul;

Linked with the golden dreams of youth,
And all its gay and gladsome things,
When childhood's innocence and truth
Lent to each buoyant day its wings.

My father smiles, and chides in vain

The tears my mother's love lets fall;

My sister's heart is wrung with pain—

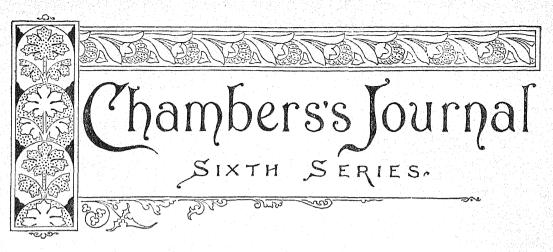
Good-bye! I soon must leave you all!

This little hour I give to grief,

With tender thoughts mine eyes are wet;
I almost seem to find relief
In reminiscence and regret!

One little hour! My woman's eyes
With waving childhood's dews are dim.
Away! Love calls! I must arise,
And hasten forth and follow him.

J. Hudson.



A DAY WITH MACAULAY.

By G. L. Apperson.



ERY Londoner knows the Albany, that long row of buildings, let out in chambers to bachelors, which links Burlington Gardens to Piccadilly. It has been well called 'a luxurious cloister, whose inviolable tranquility

affords so agreeable a relief from the roar and flood of the Piccadilly traffic.' In the Albany, in a set of chambers numbered E1, lives in January 1841 the Right Honourable Thomas Babington Macaulay. Both his History of England and his peerage are yet in the future. At the date named Mr Macaulay is known to readers as a brilliant essayist, but to the world at large is better known as member of parliament for Edinburgh and Secretary at War in the Whig administration of Lord Melbourne.

His chambers are comfortably furnished, and overflow with books. The hall, the two sittingrooms, and the bedroom are all walled with volumes. On this January morning Macaulay sits breakfasting among his books. The room has few ornaments beyond some fine Italian engravings, bronze statuettes of Voltaire and Rousseau, and, on the mantelpiece, a handsome chiming French clock given to the essayist by his publisher, Mr Thomas Longman. Macaulay is seldom without a book, either in his hand or in his pocket; and this morning, as he breakfasts, he turns over the pages of a volume of Addison and Steele's Spectator, reading a sentence or two here, glancing over old favourite passages with a smile of friendly recognition, and more rarely reading rapidly a whole essay.

Presently he rises from the table and goes to his desk. As he crosses the floor the shortness of his figure suddenly becomes apparent. There is little, indeed, in Macaulay's whole appearance to indicate the genius and learning which are enshrined within his brain. He is short, robust, and plain-looking. His head is massive and his features are rugged and homely. When in repose his face has little animation; but when he talks it is lit by the emotions of the moment, and the deep-blue eyes

sparkle with vivacity. A solid, robust individuality, of untiring energy and unwearying kindness and courtesy—such is Thomas Babington Macaulay.

Seated at his desk, he begins his labours on an article which he is preparing for the Edinburgh Review—an article destined to become famous as the essay on Warren Hastings. His text is the Life of the great Governor-general of India by the Rev. G. R. Gleig, a book which Macaulay, a day or two earlier, described to the editor of the Edinburgh as the worst book that he ever saw; and accordingly the opening paragraphs of the review which the essayist now writes are calculated to sting the reverend author with the causticity of their comment. A few sheets are drafted with flowing pen, and then Macaulay rises to prepare for his official day.

The new session of parliament has not yet opened, but Macaulay spends a few hours daily in Pall Mall. He emerges from the seclusion of the Albany into the full tide of life in Piccadilly, and heads for St James's Street and clubland. He looks in at Brooks's Club for a few minutes, and then continues his walk down the street into Pall Mall, and so to the War Office. With Macaulay's doings within the walls of that illarranged human hive we have no concern here.

Early in the afternoon the right honourable gentleman leaves his office, and, after a short visit to the library of the Athenaum Club, he makes his way Citywards. Macaulay knows the whereabouts of pretty well every second-hand bookshop and bookstall in London, and is almost as well acquainted with the stock of each shop as is the worthy bibliopole who owns it. Book-hunting is a pursuit that he loves; and when worried by the cares of office there is no relaxation so much to the minister's mind as a book-hunt among the back-lanes of the City. It would be tedious to follow this afternoon ramble in detail. Macaulay calls in at many shops where he is a well-known figure and customer, and turns over the literary wares on many a stall.

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Ballads are a specially favourite quarry of the hunter. Street ballads and songs of every kind he buys with avidity. At one bookstall, at the end of his peregrinations this afternoon, he buys a bundle of ballads, mostly broadsides, coarsely printed and adorned with the roughest of woodcuts. As he walks along Macaulay notices that a small crowd of children, who have taken much interest in his purchase, are following him; and to his intense amusement he overhears them discussing among themselves whether or not the gentleman is going to sing! Much to their disappointment, however, the supposed singer of ballads hails a passing cab, and is swiftly conveyed to the Albany. But could the children see him as he sits in the cab, his lips moving in unuttered recitation, and his hand occasionally raised with declamatory gesture, they would be still more surely persuaded that the short gentleman, if not going to sing, was at least about to make a speech. Macaulay is composing one of those ballads which will shortly be famous under the title of Lays of Ancient Rome, and as the lines shape themselves within the energetic brain, the lips move in time and tune to the ringing, martial rhythm of the stirring tale.

An hour or two later, Macaulay is dining within the historic walls of Holland House—once the abode of Addison and his Countess, and now full of memories of Moore, Crabbe, Sydney Smith, and many another man of light and leading. Charles Greville, the clerk of the Council, and one or two other guests, are present at the hospitable board over which Lady Holland presides; but the porty is small, for Lord Holland, to whom Macaulay pays so brilliant a tribute in one of his shorter essays, has been dead only a short three months.

After dinner the party reassembles in the splendid library, which is one of the glories of Holland House. It is a long gallery lined with books, and with a bay window at each end. Tradition says that Addison, when composing, was accustomed to walk up and down this gallery, finishing during the operation two bottles of wine, which stood one at each end of the long apartment. Macaulay describes it as a 'venerable chamber, in which all the antique gravity of a college library was so

singularly blended with all that female grace and wit could devise to embellish a drawing-room.

In this classic gallery Macaulay is to-night in great force. Once in the full flow of talk he gives his companions few chances to say much. He is a brilliant monologist, but knows little of the give-and-take of what is truly called conversation. He touches an amazing variety of subjects. Some chance allusion by another member of the company happens to start him on the Fathers of the Church, and Macaulay forthwith expatiates on that not too interesting topic. He mentions that while in India he had read the writings of St Chrysostom, gives the substance of a long sermon by the 'Saint of the Golden Mouth,' and thence travels on to certain obscure points in history, until Lady Holland, tiring of subjects of this kind, interrupts the flow, and shunts the talker on to a new track of ideas by saying, 'Pray, Macaulay, what was the origin of a doll? When were dolls first mentioned in history?'

Macaulay at once replies by explaining that the little girls of ancient Rome had dolls, which they offered up to Venus when they reached a certain age, and quotes Persius in support of this statement. From dolls he gets on to Milman's History of Christianity, to Strauss's Life of Christ—then a comparatively new book, and thence to the subject of myths in general. Macaulay is indeed a wonderful fount of rare and curious lore about every conceivable subject. His hearers may feel somewhat exhausted, somewhat submerged beneath the flow of learning and apt quotation; but Macaulay leaves off as unexhausted and as inexhaustible as he began.

Back once more in the quiet of the Albany, the brilliant talker appears in quite a different character. Before going to bed he sits down to write a little letter to one of his nieces. He writes a real child's letter in the simplest words and phrases, and winds it up with a description of a 'nice little girl, with a nice little rosy face,' for whom as a reward for good behaviour,

They brought the browned potatoes,
And minced veal, nice and hot,
And such a good bread-pudding,
All smoking from the pot!

JOHN BURNET OF BARNS.

CHAPTER VIII .- I TAKE LEAVE OF MY FRIENDS.



IE next month was, I think, the busiest in my life. For from the evening of my meeting with Michael Veitch my mind was firmly made up to go and travel abroad, and with this determina-

tion came all the countless troubles which a man must meet before he can leave his home. I was busy night and day, now down at Peebles, now riding up Manor and all over the Barns lands, seeing that all things were in right order ere my departure. I got together all the money I desired, and with drafts on the Dutch bankers, which the lawyer-folk in Edinburgh got for me, I was in no danger of falling into poverty abroad

On Tam Todd I laid the management of all things in my absence; and Tam, much impressed by his responsibility, though it was a task which he had really undertaken long before in the later years of my father's life, went about his work with a serious, preoccupied air, as of Atlas with the world on his shoulders.

Then I had to visit many folk up and down Tweed to take farewell; and I had so many letters given me to men of standing abroad that if I had delivered them all I should have had to spend more time than I cared. One I valued more than any other, a letter written by Master Gilbert Burnet of London to a professor in the University of Leyden, which I hoped would bring me into the company of scholars. For I had changed my original intention of going to the wars; first, because I found on examination that in my inmost heart I had that hankering after learning which would never be sated save by a life with some facilities for study; second, because now that I was the sole member of the house it behoved me to bide on the land and see to it, and any such thing as soldiering would keep me away for too great a time. I sent, too, to the College Library at Glasgow for all the books on the Low Countries to be had, and spent much profitable time reading of the history of the place and how the land lay.

During these days I was much in the company of the new master of Dawyck, and a most delectable comrade I found him. He was of a free, generous nature, and singularly courteous to all, high and low, rich and poor alike. Yet with all these excellencies there was much that I liked ill about him, for he was over-fond of resorting to the taverns at Peebles, where he would muddle his wits in the company of his inferiors.

He came perhaps every third day to Barns to ride with me in the haugh, and he would abide to supper-time or even over-night, making me fear for Marjory's peace of mind. To his sister he was most dutiful and kind; and I was glad to think that now the days might be more pleasant for her with her brother in the house. And it pleased me to think that when I went abroad my lady would be left in no bad keeping.

The days, the short January days, passed quickly over my head, and almost ere I knew the time had come for my departure. And now when the hour came so nigh I felt some pain at the thought of leaving home and my beloved countryside for unknown places; though, to tell the truth, such thoughts were not ill to dispel by the contemplation of the pleasures in prospect. Yet it was with mingled feelings that I rode over to Dawyck on a sharp Monday afternoon to bid Marjory farewell.

I found her in the low, dim room looking to the west, where she was wont to sit in winter. A great fire crackled cheerily on the hearth, and many little devices about the place showed a woman's hand. Holly with scarlet berries put colour into the sombre walls, and Marjory herself, fairer than any flower, made the firelight dull in the comparison. So light and lovely she looked as she greeted me, with her bright hair and unfathomable eyes.

'I have come to see you for the last time, Marjory,' I said; 'to-morrow I set out on my travels.'

'I am vexed that you are going away,' she said, and looked at me sadly; 'it will be lonely in Tweeddale without you.'

'My dear lass, I will not be long. Two years at the longest, and then I will be home to you and travel no more. What say you, Marjory?'

'Your will be done, John. Yet I would I could have gone with you.'

'I would you could, my dear,' I said. 'But that might scarce be. You would not like, I think, to sail on rough seas, or bide among towns and colleges. You love the woods too well.'

'Wherever you were,' said she, with her dear eyes drooped, 'I would be content to be.'

'But, Marjory, lass,' I spoke up cheerfully, for I feared to make her sad, 'you would not like me to stay at home, when the world is so wide and so many brave things to be seen.'

'No, no. I have no love for folks who bide in the house like children. I would have you go and do gallantly and come home full of fine tales. But where do you mean to go, and how will you pass your time?'

'Oh,' said I, 'I go first to Rotterdam, where I may reside for a while. Then I purpose to visit the college at Leyden to study, for I would fain spend some portion of my time profitably. After that I know not what I will do, but be sure that I will be home within the two years. For, though I am blithe to set out, I doubt not that I will be blither to come back again.'

'I trust you may not learn in those far-away places to look down on Tweeddale and the simple folks here. I doubt you may, John, for you are not a steadfast man,' and at this she laughed, and I blushed, for I thought of my conduct at Glasgow.

'Nay, nay,' I answered, 'I love you all too well for that. Though the Emperor of Cathay were to offer me all his treasure to bide away, I would come back. I would rather be a shepherd in Tweeddale than a noble in Spain.'

'Brave words, John,' she cried, 'brave words! See you hold to them.'

Then after that we fell to discussing Michael and his ways of amusing himself, and I bade Marjory tell her brother to look in now and then at Barns to see how Tam Todd fared. Also I bade her tell him that it was my wish that he should hunt and fish over my lands as much as he pleased. 'And see you keep him in order,' I added, laughing, 'lest he slip off to the wars again,'

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'Oh John,' she said with a frightened look, do not speak so. That is what I fear above all things; for he is restless even here, and must ever be wandering from one place to another.'

'Tut, my dear,' I said. 'Michael, be sure, is too honest a man to leave you again when I am off, once I have left you in his care. Have no fear for him. But we are getting as dull as owls, and it is many days since I heard your voice. I pray you, sing me a song, as you used to do in the old days. 'Twill be long ere I hear

She rose and went without a word to her harpsichord and struck a few notes. Now, Marjory had a most wonderful voice, more like a linnet's than aught else, and she sang the old ballads very sweetly. But to-day she took none of them, but a brisk martial song which pleased me marvellously well. I will set down the words as she sang them, for I have hummed them many a time to myself:

Oh, if my love were sailor-bred And fared afar from home; In perilous lands, by shoal and sands, If he were sworn to roam; Then, O! I'd hie me to a ship, And sail upon the sea, And keep his side in wind and tide To bear him company.

And if he were a soldier gay, And tarried from the town, And sought in wars, through death and sears. To win for him renown, I'd place his colours in my breast, And ride by moor and lea, And win his side, there to abide, And bear him company.

Forsooth a maid, all unafraid, Should by her lover be, With wile and art to cheer his heart, And bear him company.

'A fine promise, Marjory,' I cried, 'and some day I may claim its fulfilment. But who taught you the song?'

'Who but the Travelling Packman or maybe the Wandering Jew?' she said laughingly; and I knew this way of answer which she used when she would not tell me anything. So to this day I know not whence she got the catch.

Then we parted, not without tears on her part and blank misgivings on my own. For the vexed question came to disturb me whether it was not mere self-gratification on my part thus to travel, and whether my more homourable place was not at home. But I banished the thoughts, for I knew how futile they were, and comforted my brave lass as best I could.

'Fare thee well, my love,' I cried as I mounted my horse, 'and God defend you till I come again;' and whenever I looked back till I had passed the great avenue I saw the glimmer of Marjory's dress, and felt pricked in the conscience for leaving her. CHAPTER IX.-I RIDE OUT ON MY TRAVELS AND FIND A COMPANION.



T was on a fine sharp morning early in February that I finally bade good-bye to the folk at Barns, and forded Tweed, and rode out into the world. There

was a snell feel in the air which fired my blood and made me fit for anything which Providence might send. I was to ride Maisie as far as Leith, where I was to leave her with a man at the Harbour-Walk who would send her back to Tweeddale; for I knew it would be a hard thing to get passage for a horse in the small ships which sailed between our land and the Low Countries at that time of year.

At the Lyne Water Ford, Michael Veitch was waiting for me. He waved his hat cheerfully, and cried, 'Good luck to you, John, and see that you bide not too long away.' I told him of a few things which I wished him to see to, and then left him, riding up the little burn which comes down between the Meldon Hills, and whither lies the road to Eddleston Water. When I was out of sight of him I seemed to have left all my home behind me, and I grew almost sorrowful. At the top of the ridge I halted and looked back. There was Barns among its bare trees and frosted meadows, with Tweed winding past, and beyond a silvery glint of the Manor coming down from its blue, cold hills. There was Scrape with its long slopes clad in firs, and the gray house of Dawyck nestling at its foot. I saw the thin smoke curling up from the little village of Lyne, and Lyne Kirk standing on its whin-covered brae, and the bonnie holms of Lyne Water where I had often taken great baskets of trout. I must have stayed there gazing for half-an-hour; and whenever I looked on the brown moors and woods where I had wandered from boyhood, I felt sorrowful whether I would or no.

'But away with such thoughts!' I said, steeling my heart. 'There's many a fine thing awaiting me; and, after all, I will be back in a year or two to the place and the folk that I love.' So I went down to the village of Eddleston whistling the 'Cavalier's Rant,' and firmly shutting my mind against thoughts of home. I scarce delayed in Eddleston, but pushed on up the valley, expecting to get dinner at the inn at Leadburn, which stands at the watershed, just where the county of Edinburgh touches our shire of Tweeddale. The way, which is a paradise in summer, was rugged and cold at this season. The banks of the stream were crusted with ice, and every now and then, as I passed, I raised a string of wild-duck, who fled noisily to the high wildernesses.

I came to Leadburn about eleven o'clock in the forenoon, somewhat cold in body, but brisk and comforted in spirit. I had Maisie stabled and myself went into the hostel and bade them get ready dinner. The inn is the most villainous bleak place that I have ever seen, and I who write this have seen many. The rooms are damp and mouldy, and the chimney-stacks threaten hourly to come down about the heads of the inmates. It stands in the middle of a black peatbog, which stretches nigh to the Pentland Hills; and if there be a more forsaken countryside on earth I do not know it. The landlord, nevertheless, was an active, civil man, not spoiled by his surroundings; and he fetched me an excellent dinner—a brace of wildfowl and a piece of salted beef, washed down with very tolerable wine.

When I had finished, and mounted my horse, I found a stranger looking up at me with a glance half-quizzical and half-deprecatory. Then he spoke:

'Ye'll be the Laird o' Barns settin' oot on your traivels?'

'Good Lord! What do you know of my business?' I asked; and as I looked at him I knew that I had seen the face before. Of a sudden he lifted his arm to rub his eyebrows, and the motion brought back to me at once a vision of excited players and a dry parched land, and a man perplexedly seeking to convince them of something; and I remembered him for the man who had brought the news to Peebles of the rising of Tweed.

'I know you,' I said. 'You are the man who came down with news of the great flood. But what do you here?'

Bide a wee and I'll tell ye. Ye'll mind that ye tellt me if ever I was in need o' onything to come your way. Weel, I've been up Tweed and down Tweed, and ower the hills and up the hills till there's nae mair places left for me to gang. So I heard o' your gaun ower the seas, and I took it into my heid that I wad like to gang tae. Sae here I am at your service.'

The fellow's boldness all but took my breath away. 'What in Heaven's name would I take you with me for?' I asked. 'I doubt we would suit each other ill.'

'Na, na; you and me wad gree fine. I've heard tell o' ye, Laird, though ye've heard little o' me; and by a' accounts we're just made for ane anither.'

Now if any other one had spoken to me in this tone I should have made short work of him; but I was pleased with this man's conduct in the affair just past, and besides I felt I owed something to my promise.

'But,' said I, 'going to Holland is not like going to Peebles Fair; and who is to pay your passage, man?'

'Oh,' said he, 'I mann e'en be your body-servant, sae to speak.'

'I have little need of a body-servant. I am used to shifting for myself. But to speak to the purpose, what use could you be to me?'

'What use?' the man repeated. 'Eh, sir, ye

ken little o' Nicol Plenderleith to talk that gate. A' the folk o' Brochtoun and Tweedsmuir, and awa' ower by Clyde Water, ken that there's no' his match for rinnin' and speelin' and shootin' wi' the musket. I'll find my way oot o' a hole when a'body else 'ill bide in't. But fie on me! to be blawin' my ain trumpet at siccan a speed. But tak' me wi' ye; and if I'm no' a' I say, ye can cry me for a gowk at the cross o' Peebles.'

Now I know not what possessed me, who am usually of a sober, prudent nature, to listen to this man; but something in his brown, eager face held me captive, and his powerful make filled me with admiration. He was honest and kindly—I had had good evidence of both; and his bravery was beyond doubting. I thought how such a man might be of use to me in a foreign land, both as company and protection. I had taken a liking to the fellow, and with our family such likings go for much. Nevertheless, I was almost surprised at myself when I said:

'I like the look of you, Nicol Plenderleith, and am half-minded to take you with me as my servant.'

'I thank ye kindly, Laird. I kenned ye wad dae't. I cam' to meet ye here wi' my best claes for that very reason.'

'You rascal,' I cried—half-laughing at his confidence and half-angry at his audacity—'I've a good mind to leave you behind after all. You talk as if you were master of all the country-side. But, come along; we will see if the landlord has not a more decent suit of clothes for your back if you are going into my service.'

From the landlord at the inn I bought a suit of homespun clothes which by good fortune fitted Nicol, and left his old garments as part payment. Clad decently, he looked a great, stalwart man, though somewhat bent in the back, and with a strange craning forward of the neck, acquired, I think, from much wandering among hills. I hired a horse to take him to Edinburgh; and the two of us rode out of the yard, followed by the parting courtesies of the host.

Nicol rode like a trooper, sitting his horse as if he had rarely been out of the saddle in his life. 'Where did you learn it?' I asked him, when we were almost into the little town of Penicuik. 'You seem to have been much used with horses.'

'Ye may weel say that, sir. I've ridden a horse on places that never a hoof touched afore. Ye'll hae heard tell o' Talla Linns and the sklidders abune?'

'Heaven defend us!' I cried. 'You have never ridden there?'

'Ay have I,' said he grimly, 'and to waur bits; but that stories 'ill keep till anither time. It's no guid to spoil our startin' by tellin' wanchancy tales. If ye wad like it, Laird, I wad sing ye a bit glee;' and when I gave my

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consent he broke into one of these wild, stirring ballads the country folk sing at the fairs, and from this place onward beguiled the way with many curious catches.

When we came to the brac above Rosslyn he halted and looked back to where the long-backed hills of Tweeddale broke the sky-line. A tender look came over his face. 'There ye are,' he cried, waving his hand, 'a' my ain bonny hills. I ken ye every ane, and mony a time I've wandered among ye. But it'll be lang or I see ye again, for I'm awa to laigh lands; but I'll no forget ye.'

I gripped his hand, for his feelings were mine, and I honoured the man; and from that moment began a perfect understanding between the two of us. Now I was glad that he had come with me, for he shortened the way with stories and

jests which he had gathered in his many travellings, and had me now laughing and now sad, but always delighted.

Of our journey to Edinburgh I have little else to tell. We came to the town in the afternoon, and went through the streets to the port of Leith after leaving our horses at the place arranged for. I was grieved to part from Maisie, for I had ridden her from boyhood and she had come to know my ways wondrous well. We found a vessel to sail the next morn for Rotterdam, and bargained with the captain for our passage. When all had been settled, and we had looked our fill upon the harbour and the craft, and felt the salt of the sea on our lips, we betook ourselves to an inn, 'The Three Herrings,' which fronted the quay, and there abode for the night.

GARGOYLES AND VANES.

By SARAH WILSON.



HEN'we look up to the rows and rows of long level sky-lines made by the ridges of our roof-tops, it is pleasant to note their monotony occasionally broken by crest-tiles of an ornamental character. Few of

us are aware of the prehistoric ancestry of these decorative ridges. In the old time before us, roofs were covered with sods or thatch, and out of these primitive materials grew weeds and wild-flowers, as their seeds were borne on to them by the winds, or carried to them by birds, which gave to their outlines the flowery effect these ornamental ridge-tiles try to reproduce for us. There are, moreover, some other features on our roofs well worthy of notice.

Let us look at some of the old rain-water spouts, or gargoyles. It is only recently that the word gargoyle has found its way into our dictionaries. Even technical glossaries of repute passed it over a few years ago. But now it is not only included, but chosen for illustration in lexicographical works that are enlivened with woodcuts. This advance in public estimation is probably the result of the exceptional wave in the waters of sanitary science now passing over us, which has drawn attention to the manner our ancestors made provision for the limitation of one of the evils with which they had to contend. We find our predecessors not only contrived a means to prevent the damp that would have ensued if rainwater had not been diverted from falling off their roofs into the foundations of their buildings, but so treated these discharging spout-heads from their gutters as to make them give considerable ornamentation. The application of the term gargoyle to these contrivances is said to be due to the dragonlike character that was at first given to them, coupled with the fact that there was a particular dragon known by that name that kept the district round Rouen in trepidation. Directly these fantastic spouts came into use they were treated as works of art, in so far as two were never made alike. Those who have studied the subject aver that many of them are fine works of sculpture; and they are often so adroitly placed as to bring out the salient points of a fabric, and conduce to its pleasing effect. They were employed from about the middle of the thirteenth century, and were gradually improved in form and delicacy of design and execution. At first they were somewhat short and thick, but after a time were made longer, to project farther, and with more elegant details.

Draped figures pouring out the waters from urns or vases are frequently seen on ancient buildings; but grotesque animals and strange birds are more usual. They are most conspicuous when placed at the angles of towers. They are, however, quite as frequently found along the aisles of churches, protruding from the parapets, to throw off the waters falling from the higher roofs of the naves. There is one on the roof of the aisle of Morpeth Church in which the rain pours out of a vessel held by a female figure. There are many ancient examples in Yorkshire churches, as at Bedale, Wensley, and Spennithorne. They form interesting features below the parapets of Pope's Tower at Stanton Harcourt, as well as on the church close by, peering down into the ripe old garden and scanning the distant country. In the quaint nook in the ancient city of Wells called the Vicars' Close, which is approached through a hoary archway rich with sculptured ornamentation as heary and impressive, thereare several elaborately carved gargoyles looking down from the embattled and open-work paranets of a neighbouring roof upon the placid length of the close and upon the gabled fronts of the vicars' houses with their charming oriels, one of which represents a hooded monk with a roll in his hand. from which the waters issue. There are examples in Northamptonshire, in Somerset, at Lostwithiel in Cornwall, and, in fine, in most counties. France and Italy they are still more numerous, Nor has 'the modern,' as we have been called, discarded them. They help to make up the picturesque outlines of the superb chalet in Northumberland known as Cragside. Craning their long necks above the roof-tops of various parts of the structure, curious creatures look over the rocky steeps, the rock-formed steps in the banks, the cascading and eddying burns, their fern-clad banks, the sweeps of choicest heather, the flowery walks, and the great silent stone-strewn moor encircling the grounds, with considerable contribution to the attractiveness of the building.

Weather-cocks or vanes, or fanes, as they were formerly named, are also interesting features on They have their legends, and can even boast a fulfilled prophecy. There was an old assertion, similar in character to many of Mother Shipton's prophecies, that the ball on the top of St Paul's Cathedral and the vane of Bow Church should one day be under the same roof, which, unlikely as it appeared, actually took place when they lay side by side for repair, or additions, in a London foundry. They have a dash of comicality, too, as when in the days of Jumbo's popularity a huge elephant was placed as a vane on a high water-tower at Colchester. Their artistic value has been noted and made use of in many works of repute. Even the late poet-laureate more than once gave them a place in his word-pictures. In Walking to the Mail, John asks: 'Whose house is that I see?' And goes on to explain:

'No, not the county member's with the vane:
Up higher with the yew-tree by it and half
A score of gables.'

And in The Letters the first line reads, 'Still on the tower stood the vane.' In Aylmer's Field, too, there is mention of a blazing wyvern that 'weather-cock'd the spire.'

Longfellow, likewise, used them often as touches of enrichment. The Academy on the Hill of Science, in the Poet's Tale, has a belfry crowned with a 'vane of brass;' the village church spire, in The Children of the Lord's Supper, is tipped with a vane of metal; Paul Revere 'saw the gilded weather-cock swim in the moonlight' when he galloped into Lexington; sunsets gilded the vanes on the chimneys in the little village of Grand Pré; and on the farm-buildings of Benedict Bellefontaine, over the thatched roofs and the corn-lofts and the dovecots, 'in the variant breezes numberless noisy weather-cocks rattled and sang of

mutation.' And it would be easy to lengthen this list from the pages of other poets. The cock is regarded as a representative of the one that crowed on the morning that Peter denied his Master, by those who find types in all architectural features. The instrument of martyrdom of the patron saints of some churches are chosen for vanes, as in the case of the gridiron of St Lawrence at Bishopstone Church, Herefordshire. Heraldic devices are still more frequent, especially on old manor-houses. Banner-shaped vanes are also very general. These are survivals of the old custom of displaying the heraldry of a proprietor on the banner that he unfurled on his topmost tower, or rather an application of the same mode of proclaiming his proprietorship, as many of them are perforated with crests and monograms. Looking up at them from the ground, no one would give them the credit of their dimensions and weight, which are really very considerable. They are often made of gunmetal, and weigh several hundredweights. copper vane on West Vale Church, Halifax, weighs, with its cardinal points, twelve hundredweight, and the cock measures between two and three feet from beak to tail; and this is by no means an unusual size.

In a few instances there may be seen, standing out shadowless against the sky, on the roofs of ancient castles, stone figures of men, life-sized, hurling down stones, or discharging arrows, or in other ways taking part in the defence of the fortress. These are thought to have been placed there to give an appearance of a good strong garrison, and to confuse besiegers when taking aim at such of the beleaguered as manned the walls. They are to be seen both in England and Scotland, and they have been noted as well on ancient town-gateways. There are a score or more of these stone warriors on the roofs of the towers of Alnwick Castle. Some of them stand on the coping of the battlemented parapets; and they stood there, looking down into the courtyards, or baileys, when three Plantagenet kings successively rode under the deep-ribbed archways of the entrance gateways, and, dismounting, strode into the thick-walled chambers of the keep of the ancient Percies; for they are of great antiquity. They are not only on such of the towers as are easily approached, but upon those defending the innermost courtyard. Some carry shields; some have crossbows; some have lifted large stones shoulder-high; others appear to be merely watching. No two of these are alike, as in the case of

The outlines of the gables of some roofs, instead of being two slanting lines forming an angle more or less acute, are made in steps. This form is called step-gabled in England, and corbie-gabled in Scotland; and it possesses an old-fashioned charm, combining movement, dignity, and a pleasant air as of salutation and welcome. There are several good examples in Norfolk. The real home of the

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corbie-steps, however, is in Scotland, where it may be considered a national feature. Argyll House, Stirling, owes as much to the corbie-stepped gables as to the high cone-shaped roofs on its staircase towers for its quaint effect. The corbelled-out bartisans of such edifices as Elcho Castle, Perth, would lose much of their indescribable character if associated with gables finished in a less characteristic manner. Thousands of brave Scots in distant lands, recalling and picturing to themselves the auld house at home, amidst their foreign surroundings, think of them with indelible delight. The first view Waverley had of Tully-Véolan manor-house, it will be remembered, consisted of steep roofs and narrow gables with lines indented with steps; and on further acquaintance he saw, projecting from the roof among the bartisans and turrets, gargoyles in the form of the bears which were so lavishly used to decorate the building. And, although this is not a sketch of any particular mansion, Sir Walter Scott tells us he has incorporated in it the peculiarities of various old Scottish seats, and especially features to be found in the ancient houses of Warrender upon Bruntsfield Links, Old Ravelston, Dean near Edinburgh, Grandfully, and perhaps Traquair. The great word - painter has not omitted to mention there was a gilded bear there, too, 'by way of vane.'

So far, we have glanced only at the old-world relics upon our roofs. Over and above these we have various presentments of our own progress. On some roofs we may see anemometers, with their balls 'swimming in the moonlight' like the vane Paul Revere saw as he galloped into Lexington, or languidly poised in the golden sunshine, or tearing round and round in tempests; on others we may see lightning-conductors. There is an anemometer, for instance, on the summit of the highest tower of the keep of Alnwick Castle, high above the heads of the stone warriors mentioned as guarding the roofs of many of the lower towers around it, as well as a lightningconductor. There are long lines of telegraph wires, the gossamers of modern invention, stretched across the roofs of thousands of our houses; and telephone and electric lighting wires are becoming equally general.

Just as there is 'a soul above the soul of each which yet to each belongs,' as the poet has it, so there is above our streets and above our roof-tops, frequented only by the birds of the air, a strange city of gargoyles, vanes, statues, lightning-conductors, fire-escapes, ventilators, advertisements, signboards, and miles and miles of wires, crossing and recrossing, veiled in 'the curling smoke' of chimneys, with legends and traditions and poetry of its own,

JUST AN EPISODE.

By FLORENCE EUGÉNIE DAVIDSON.

CHAPTER I.



TRIED not to show it, but I certainly was irritated: my breakfast lost its flavour, and I could not endure to see Mimsy, just outside the dining-room window, revelling in the sunshine which lapped her

around as though it loved her, while she fed the pigeons and coo-coold to them in their own soft tones.

And there was my sister Priscilla, seated opposite me, stabbing me again and again, pitilessly, mercilessly, though unconsciously, until it was a relief to hear the crunch of horses' hoofs on the gravel, and know that I could leave home-vexations behind for a time as I flew along to visit my patients.

On one point I was absolutely determined: I would not marry Mimsy. That is to say, I would not ask her to marry me. That should at last be settled beyond alteration. I had been working up to this conclusion for a long time. Since I became her guardian, when she came to me twelve years ago, a dainty little maiden of six, the young monkey had woven herself into my life until she was a part of it. And as she grew from childhood into womanhood, tall and slim and fair, brighten-

ing the house with her sunniness and making everyone love her, I became conscious that some day, perhaps before long, she would assuredly be wooed and won.

And now the blows that I anticipated were beginning to fall: this was the first; there would be a series. And I—under whose care she lived, who loved every tone of her happy voice, every touch of her soft hand, loved her as I felt sure no other man, however worthy and ardent, could ever love her—would not even try to win her love in return. And why? Well, the long string of letters after my name represented many years of hard work, and made me realise that I was forty—just to think of it!—while Mimsy was only eighteen. Then I stood in the relation of a father to her. It could not be otherwise, in spite of all the little tender caresses of which she was so prodigal. They meant nothing more than a child's gratitude and appreciation of kindnesses received.

And now, what was it that Priscilla said that took the flavour from my coffee and made eating a pretence? Her words rang in my ears as I was borne along.

'Yes, Mimsy is certainly very attractive and

sweet, and no wonder Harry has lost his heart to her. Do you know, John, the boy came to me last night in a very diffident way and asked me to speak to you?'

Knowing me to be a man of few words, Priscilla did not appear to expect any comment. If she could have seen the big thump that my heart gave at that moment, she might not have continued so

placidly:

'You see, John, Harry has confided to me that he loves Mimsy. He said: "Auntie, I believe I have always loved her. I cannot remember the time, since she lived with you, when it was not a pleasure to be with her, to run and fetch and carry for her, and to be her slave. No other woman has ever for one moment come before her. I think she cares for me too. Will you speak to uncle? I feel just a little afraid that he will not think me worthy of her. And yet, if he would give his consent to an engagement, I would prove myself worthy. I would work, and rise in my profession, and make a name that you should all be proud to hear." Harry has the greatest admiration for you, John'—

It was at this precise moment of Priscilla's discourse that I formed a desperate and sudden resolution. I would not only allow but would help on this affair. If Mimsy cared for Harry, she should marry him if she would. I got up from the table, and composed myself sufficiently to say:

'Harry is a fine young fellow, Priscilla; tell him

he may try his luck.'

In came Minusy through the open window, and, seeing that I was just going, darted across the room and linked her hands over my arm:

'What! going already, Guardy? Bother the patients; they are always taking you away from us.'

And then she put her soft lips to my hand and gave it a series of little kisses. I remonstrated:

'My dear child, you are getting too old for this sort of thing. You really must not behave so foolishly.'

But she only laughed.

'You dear, sweet, good man, there is no one like you in the whole world. I'll see you into the carriage.' Which she did, standing on the step to have a parting word. 'I want to consult you, darling, particularly.' Then she jumped lightly to the ground and waved her hand as I disappeared.

CHAPTER II.

WAS much disturbed by Priscilla's announcement; but when the carriage stopped I resolutely put all thoughts of it away, giving to my day's work the

attention I loved to bestow. It was always pleasant to me to see the brightening of a weary face when I entered a sick-room, or to give relief when a delicate case of surgery demanded all my care and skill.

That morning I had a large number of patients to visit, and it was past the usual time when I turned into the drive of my own house, to see those who, I knew, would be awaiting me there.

Arrived in the consulting-room, I glanced down the list which my man had put on the table. The first name on it was that of General Miller. I rang the bell for him to be shown in.

A few moments later and Harris's quiet step crossed the hall; but instead of announcing the General, whom I rose to receive, he said: 'Miss

Miriam, sir,' and retired.

And there before me, in defiance of my strict rule prohibiting members of my household from intruding on my professional time, stood Mimsy, in all the glory of full riding-costume, her face flushed with the consciousness of her wrong-doing, and her eyes sparkling with mischief.

'Sure, thin, docther darlint,' she said, with a fine Irish brogue put on for the occasion, 'it's myself that's very ill. An' will ye be prescribin' for me

now?'

Then, catching sight of my face as I stood silent, severely displeased, she changed her tone:

'Oh, yes, I know. But it's all right. I listened for the bell, and pounced on Harris, and made him show me in.'

Then she tried coaxing.

'I do want a few moments of your time, Guardy. And you can make me pay for it, you know. Send in your bill, as you do to your other patients.'

I took no notice of this intense rudeness. People who live in constant daily intercourse with you sometimes permit themselves to say things which the less intimate would not say. It is the contempt following familiarity.

'Well, make haste,' I said, with more asperity than I felt, withdrawing my hand, which she had seized in her slim fingers; 'I have a roomful of

people to see, and my time is precious.'

'Î hate patients!' she exclaimed emphatically. 'If I married a doctor I would offend them all. Everything has to give way to them—horrid things!'

I made a gesture of impatience.

'I wonder if you will ever grow up, Miriam,' I said. How very young she was!

Suddenly she went to the point.

'You see, Guardy, it's just this. Harry asked last night if he might ride with me this morning; and Priscilla says I must ask you if you approve of so much scampering over the country with Harry, and so—and so'——lamely. 'Well, that's all, Guardy.'

All, indeed! I restrained a desire to take her by the shoulders and put her out of the room. Wasting my time for this! And yet, after all, it was right that she should come to me; right, if Harry loved her, that he should have a chance of telling her so. And why not now? Harry was twenty-four, a fine, honest, straightforward young

IN COMMAND OF A COMPANY.

AN EPISODE OF THE TURCO-GREEK WAR.

By THEODORE THEARLE.



IMPLORE you, Sophia, to listen to reason and come with me at once; every moment's delay is increasing our peril.'

'And be a coward!' she interrupted, with such withering scorn

rupted, with such withering scorn in the last word that a flush rose to my cheeks.

'Precaution is not cowardice but wisdom,' I retorted, somewhat nettled; 'while to remain here another hour is simply madness. Look yonder; there are the Turkish camp-fires not four miles distant; while, from what I could learn this afternoon, the Greeks are retreating, and have changed their line of defence, so that there is actually at this present moment not a man between us and the enemy, and we may expect a visit from some of their scouts at any instant. Such a house as this will not long escape their ravenous gaze.'

Don't dare to tell me, Jack, that the Greeks are retreating. It is a downright lie, and I scorn its teller. With that she stamped her little foot so vehemently that I started at the wild, patriotic passion that fired this flashing-eyed Thessalian maid; and, angry and annoyed though I was at her stubborn resistance to my wish, my admiration and love for her was only inflamed a hundred-fold by her unselfish

and reckless heroism.

'Come, like a good girl, and talk sensibly,' I replied in a coaxing manner, trying at the same time to take hold of one of her hands, which, however, she indignantly withdrew. 'There is no denying we are between two fires at present. To-morrow, more than likely, there will be a battle, and your father's house here is sure to be seized by the Turks; and what will become of you then, Sophia?' and I shrugged my shoulders by way of warning.

'No, Jack; I shall stick to my post,' she answered persistently. 'If there is a battle, all the greater need for me to be here to tend the wounded. Who knows but that my father or brothers may be carried in here, and shall I be less brave than they? Besides, I have no fear for the Greeks; they will soon drive the Turks out of this helter-skelter. As soon as it is daylight I shall hoist the Greek flag, so that they

may know where I am.'

*For heaven's sake don't do that, Sophia; it will bring a horde of Turks down on you at once. What a fool I have been to remain here so long, or let you stay either! It was my love for you, Sophia, I added in tenderest tones, that made me consent to your wilful delay.

'You might have been better occupied fighting

for dear old Greece. I was quite competent to look after myself,' was the cool rejoinder.

'Precious little use I would be to them. I always find people can manage their own affairs much better without the fussing help of outside individuals. You see, I am not a boaster, like some others I know.'

'You mean Captain Xenides by your cowardly sarcasm. It little becomes you to miscall a brave man who is fighting nobly for his country, while you, who profess love for me, are hanging round, with your hands in your pockets, doing nothing'

'Except risking my head every moment I wait here, which is more than that penniless adventurer would dare to do for you. You know well that the Turks have good cause to hate me. My love for you, Sophia, has led me to spend more money than was either safe or prudent in helping to arm your thankless nation.'

The deep flush of anger that heightened the colour on cheek and forehead of this handsome, high-blooded girl warned me that my jealous frenzy at the name of a dreaded rival had over-

stepped the mark.

Ah, you English! you are all alike a race of shopkeepers. It is always money, money, with you. You boast and brag of it as if it should buy everything. In your arrogance and conceit, no doubt, you think you have a right to me, being the richest bidder. How I do pity your poor English girls! But it is time you learned a lesson; and I am glad I am here to teach you there is something your money can't buy, and that is a Greek girl's heart. That can only be won by the brave man who dares to fight for his country.'

'Now, look here, Sophia, before this wretched, foolish war broke out, and that mealy-mouthed Xenides put such stuff and nonsense into your head, you were really a sensible girl; and I think, Sophia, you cared a little for me.'

'Sensible! Thank you for your complimentary condescension. I suppose "sensible" girls in England fetch higher prices. As for caring for you then, why, that was before your courage had been tested'—

'And you had seen the smart uniform and dashing bearing of Captain Xenides,' I added, with slight scorn.

Then, as I thought a moment, a resolution formed itself to go over to the Greek lines, and by representing her danger to the commander, prevail upon him, for her father's sake—a well-known colonel—to send a small contingent to rescue her from her peril; for my heart sickened

at the thought of such a beautiful girl falling into the hands of the Turks.

'Now, Sophia, time is precious. Not caring to lose my head as you have done, only in a different way, I am determined to put some miles between myself and these swarthy rascals over there,' I said, pointing to an irregular line of flickering flames that now seemed brighter in the gathering dusk. 'If you will not come, then I must say good-bye—perhaps—for ever.'

My faltering tones suddenly seemed to touch the deeper passionate nature of the girl, and there,

in the darkness, she took my hand:

'You have been a kind friend to me, Jack, and should we never meet again you will sometimes think of me, Jack, won't you? My duty will not let me go with you. If I do fall into the hands of the Turks, and if they are as bad as report makes them out to be, do not fear on my account. See'—and she opened the bosom of her dress and took out a small revolver, whose cold, polished steel muzzle glistened in the darkness—'that will rob them of their prey. Good-bye.' Then she lifted her beautiful face to mine, and in a moment my lips were pressed against hers in one long, passionate kiss, until she gently pushed me back, and, turning round, vanished into the house, leaving me standing in the garden alone.

My first impulse was to dash after her and avow my intention of standing by her and defending her to the last; but a moment's reflection showed me the folly of such an idea. What could one man do against a multitude of armed soldiers? Besides, if I could possibly reach the Greek lines I might succeed in getting a company

to come to her rescue.

This last thought determined my movements at once. Taking a glance at the dim glare that marked the position of the Greek camp-fires, I started off at a brisk pace in that direction.

The stillness as of foreboding death reigned over the land, and above the darkness one by one the stars peeped out, like the distant camp-fires of a heavenly host gathered on the eve of battle

to witness the scene of carnage.

But there was little time to think of the beauty of the night. If one has ever tried to cross a vine-growing country, especially at night, he will know and appreciate the difficulties that faced me; the high walls to scale and deep ditches to jump tested temper and patience.

I had just reached a little stone-paved path, winding in and out amongst the vineyards and olive groves, when I heard the clatter of horses' hoofs behind. A lemon-tree grew near at hand, and in a few seconds I had climbed into its branches, hiding myself as best I could amid its leaves.

A group of horsemen presently appeared, approaching at a walking pace, and the Turkish fez and tunic soon indicated their nationality.

I held my breath as they passed beneath, and

catching a few of their words which happened to be intelligible, I guessed that they were in search of some one,

I had scarcely descended and gone a few steps to the left through a vineyard, when I was arrested by talking just in front, and almost walked into another Turkish patrol. Things were looking exceedingly unpleasant, and I bitterly repented having waited so long with such a fool-

hardy girl.

Slowly I groped my way back to seek the kindly shelter of the lemon-tree, and as I did so I became aware of stealthy footsteps following. With the sudden impulse of flight I quickened my pace, but the cat-like tread followed hard behind. I had certainly been noticed, and yet I wondered at this mysterious mode of tracking. Why did they not challenge me at once to stand? There was something suggestive of hidden devilry in its slyness; and all the stories of Turkish atrocities that have been circulating so freely amongst the Greeks flashed through my mind and made my nerves tingle with a strange dread.

However, I kept stumbling on my way, ever conscious that my pursuer, with sinister purpose, never allowed me to escape his sight. If there had just been one I might have risked an encounter, but with so many Turkish soldiers round, such a proceeding would be absurd; my only chance was in trying to discover some place of concealment.

On arriving at the middle of a rather dense grove, I was on the point of turning round to see if my silent pursuer was near at hand, when I felt a sudden grasp on my throat, and I was borne to the ground by a powerful arm, as a voice whispered in broken Turkish:

'Not a word or you are a dead man!' while the gleam of cold steel, in the shape of a dagger held aloft, enforced this strange command.

Knowing that in war threats are most summarily carried out, and that one dead man more or less matters little, I prudently held my peace, and a peculiar instinct restrained me from struggling.

For a while he held me motionless until the tramp of horses' hoofs on a neighbouring road died away, and then, a weird curiosity overcoming my patience, I managed to gasp:

'What do you want?'

'Your clothes,' came the muffled answer.

'Was the man mad?' I wondered; for what could he want with clothes, seeing that he was resplendent in officer's uniform? 'Ah! most likely a deserter,' I thought, 'and wants an exchange of garments. Well, perhaps after all it might not be so bad for me; a uniform might help me to pass the Turkish lines easier.'

'Is that all?' I asked again with whispered breath, for which now I seemed to understand the reason.

'Yes, an exchange.'

'All right; there is my word of honour for it.'

He relaxed his hold, and silently, in the stillness and gloom of the clump of trees, we each divested ourselves of our respective garments and made a fair exchange.

'Your name?' he whispered.

'James Henry Nuttall of Liverpool.'

I was going to ask his by way of return, when he suddenly vanished as stealthily as he came. It was not until I had fastened the last buckle of my uniform that the awful truth dawned on me that he was a Greek officer, a spy most likely, sorely pressed by the enemy's scouts. I hastily glanced at my clothes; and, dark though it was, I soon recognised the Greek uniform, though I could not yet distinguish the colour. That accounted for the strange Turkish accent of my assailant, which at first I had imagined was due to whispering and my own ignorance.

My already evil plight had thus become vastly worse, for it was evident I personated the man for whom the soldiers were in search. Possibly he had been challenged and made off, with the Turks in pursuit, and in his desperation had crossed my path, when his quick wit suggested a chance of escape. Altogether I smiled grimly as I thought my name would not extract much leniency from the Turk, for, owing to the silly love affair and my devotion to a headstrong girl, I had made myself most obnoxious to the Turkish authorities, and was regarded as partly responsible for the war by supplying money for arms and ammunition to freebooters.

Once more I heard footsteps and voices approaching. I seemed to be in a veritable nest of the enemy. In despair I gazed wildly round, looking in vain for some hiding-place. There was none. Two Turks were already in sight, and a shrill 'Who goes there?' sounded in my ears, and I caught the glimpse of a raised rifle. With one bound I cleared a small mound of earth in front of me, and leaping over another wall, took to my heels as fast as my legs could carry me, while the swift 'ping' of a bullet sped through the air close to my ear.

When a boy my only prizes at school had been for races, and in a moment I seemed to have recovered my old agility. As in that wild steeplechase for life I sprang over the succession of mud walls that surrounded the numerous vineyards, the commands of the old drill-sergeant kept ever recurring: 'Feet well together! Chest expanded!'

Portunately I had taken a direction impossible for horsemen, so, save for the bullets that whistled past, I was unfollowed. My last leap, however, ended with an unexpected blow, as down I fell some twelve feet on the opposite side of the dike,

and lay stunned on a heap of stones.

When I awoke to consciousness day had dawned, and the earth seemed actually to be trembling with the noise of battle. Away to my right an incessant roar of artillery showed that the warcloud had burst, while every now and then a

sharp, crackling fusillade told of hotter and closer engagements; and suddenly I would start at the sound of a loud whir as a shell passed overhead.

Putting my hand into the breast-pocket of my tunic, I discovered a small flask of brandy, which quite refreshed me; and, starting to my feet, I followed the bed of a little river towards where a small party of Greeks were gallantly defending a grassy knoll. Partly covered by the banks of the stream, I managed to arrive at the spot with little danger, and had barely reached the top, when I was accosted in a loud voice by a heated and smoke-begrimed-looking major on horseback.

'Hollo, captain! Mighty glad to see you, wherever you have dropped from. Have you a command?'

'No,' I gasped half-breathlessly. And then, before I could utter a word of explanation, he exclaimed:

'Here, then, take charge of this company. Both the other fellows are hit. Hold this mound at all hazards. I'll be back shortly;' and setting spurs to his herse, he galloped away till lost in the clouds of smoke that hung deep and heavy over the scene of conflict.

'Well, that's cool!' I murmured, as, taking out my white-silk handkerchief, to which I had clung in the exchange, I wiped the perspiration and dust from my brow. I, James Henry Nuttall, banker, of Liverpool, and manager of the Anglo-Greek Heritable Trust, Limited, in command of a company! I know that most of my acquaintances would be likely to say, 'Pity the company!'

It was impossible to follow the major and explain, even if in the confusion of battle he could understand. To slink off was alike most hazardous; the excited soldiery would at once suspect cowardice and soon make an end of me.

Looking round, I noticed with satisfaction that the men seemed to understand their work thoroughly. At present it consisted merely in exchanging shots with a skirmishing party of the enemy, who, I was delighted to observe, were in retreat, having evidently just been repulsed.

The battle seemed to roll far to the right, and we were on the extreme left, and so as time went

on we soon had little to do.

Not a mile away, a little to our left, stood Sophia's home, nestling sweetly amid its orange and olive groves. The extremes of the Turkish right wing seemed to be within about half a mile of it, though as yet I could discern no soldiers near.

Suddenly an inspiration seized me. Why not rescue her with this company that had fallen to

my command?

I called the wizened, grizzly-looking sergeant who was standing near, and telling him I was one of the English volunteer officers serving with the Greeks, and therefore slightly unfamiliar with the words of command, I said I should leave the issuing of orders to him.

'There are some prisoners in yonder house,' I

said, 'whom we have to rescue. Now is our time. There do not seem to be many of the enemy about there. Advance in open order.'

In a few moments 'my' company were hurrying across the intervening country in grand style.

'I think they are signalling your instant return,

sir,' said the sergeant, saluting.

'Never you mind, sergeant. Obey my orders for the present;' and I uncased the revolver at my belt in a threatening manner.

Ere long an aide-de-camp came galloping up.

'The colonel wants to know what you are about, sir, and commands your retreat at once.'

'Tell the colonel to mind his own business; and if he wants to know what I am doing he shall see directly,' I replied hotly, for a sudden movement of the Turks towards Sophia's house increased my fears for her safety and roused me to a state of fierce excitement.

She had evidently noticed our coming, for suddenly from the centre of the flat-roofed house the Greek flag unfurled itself to the breeze.

At that sight my men could not restrain a cheer, and in my heart I blessed the courageous girl.

The Turks saw, and came rushing to intercept. 'Forward, lads!' I cried, springing in front, as with drawn sword I led them in my frenzy against the opposing Turks. I felt the bullets whistling past, but heeded not. Next moment we were close at hand, and I had the vision of a big, burly fellow aiming a blow at me. Instinctively I raised my sword to parry, but in vain. Down I went with a crash to the ground under that stunning blow, and my eyes were blind with blood as I staggered to my feet again.

'Bravo, sir!' cried the sergeant at my heel, as

he stopped for a moment to examine my wound. 'Only the cheek slit, sir. Yes, I will tie it roughly up with the handkerchief,' he said as I held its silken folds out to him. And he certainly did it in a most business-like way.

Our charge had swept the Turks back, and in a few seconds I was once more in the house

which I had left the previous night.

'Oh captain,' cried Sophia, coming to me and not recognising my bandaged, blood-stained face, 'do, do, for mercy's sake! do push on but to yonder grove and save a young Englishman whom the Turks are about to shoot! They just caught him a short time ago, and are going to kill him. Oh, do !' and her tear-stained eyes looked up to me with a most piteous expression.

'You love him?' I asked in a mumbled voice; and as a faint crimson blush warmed the deathly-

pale cheeks, she exclaimed passionately:

'Yes, with all my soul and'-But she got no farther, for, to her dismay, I caught her to my breast.

It took me some moments to convince her that the grimy, martial figure who held her in his arms was 'her Jack,' but soon it was all explained.

I despatched, however, some men to rescue what turned out to be my Greek assailant of the pre-

vious night.

Meanwhile the Greek general signalled to remain where we were until reinforcements came, as our sudden dash had turned the flank of the enemy and saved Greece a disastrons day.

I need hardly say that ere the sun set I returned my sword to its lawful owner, and, loaded with the thanks of all, carried my promised bride far from the sound and smoke of battle.

HEALING BY OXYGEN.



T is somewhat humiliating to our pride of civilisation to observe in how many cases we have been indebted to uncivilised peoples for very valuable knowledge bearing directly on life and health. A

very conspicuous illustration of this is afforded in an entirely new system of healing wounds which has lately been attracting a good deal of attention, and which certainly appears to have achieved some very remarkable results.

This new system is known as the oxygen treatment, and appears to have been suggested by a practice of the Zulus. During the Zulu war it was observed that these dusky warriors were accustomed to carry their wounded as far as they could up the nearest mountain as a means of facilitating recovery. They, of course, knew nothing about the science of the matter; all they knew was that it was the immemorial practice of

their tribe, and that as a matter of fact a wound healed sooner high up on a mountain-side than it did on the plains below. That was the experience of the Zulus; and in the light of the teaching of recent bacteriological science, it looked to be not at all improbable that it should be so.

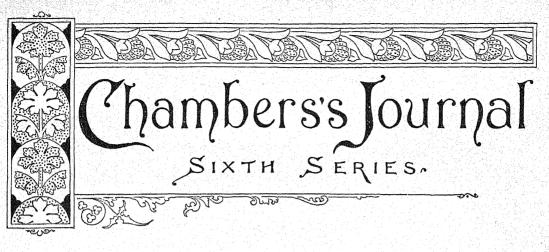
Modern science has shown that in all surgical matters micro-organisms play an all-important part. Wherever there are wounds or sores, living things, microscopically small and amazingly numerous, soon begin to show themselves; and, under certain very common conditions, they bring about inflammatory and putrefactive complications. Lister's great discovery consisted in the recognition of the troublesome action of these micro-organisms, and in the devising of means of getting rid of them. They are constantly present in the atmosphere, and wherever there is a wound or a sore exposed they are ready to fasten on it. Lister discovered this, and he devised the antiseptic treatment' of wounds as a means of keeping out these mischievous agents. Only exclude these troublesome disturbers from a wound made by the surgeon's knife, and, generally speaking, the healthy forces of nature will heal that wound quickly and easily. The truth of this theory and the splendid practical success that has attended its adoption are known to all the world.

Experiments in the oxygen treatment of wounds have, however, suggested some modifications of the theory upon which Lord Lister has based his great and beneficent revolution in surgical practice. 'Listerism,' as it is conveniently called, assumes that all micro-organisms in wounds are bad, and that success in healing depends very greatly on their being destroyed altogether. According to the newer theory this is not quite true. There are good bacteria as well as bad. Just as there are good fairies and bad, just as in the world around us there are moral influences that corrupt and deteriorate and destroy, while there are others whose tendency is all to purify and strengthen and improve, so, it seems, in this tiny physical world of micro-organisms there are some that work for death and destruction and others for life and health. And just as in the universe at large there is a spirit of goodness, a power that makes for righteousness, discouraging and suppressing the bad and helping and fostering the good, so it is said to have been found that oxygen-gas kills out these mischievous and destructive micro-organisms — Streptococci, Bacillus fluorescens, Bacillus fætidus, rod bacteria, and so on, as bacteriologists have learned to call themwhile it invigorates and encourages the growth and development of those that tend to build sound and healthy flesh - such as Staphylococcus albus, Staphylococcus aureus, and Staphylococcus citreus.

It does not, it will be seen, come into conflict with Lord Lister's teaching, or in any way detract from his splendid discovery; it supplements and develops it. It is true, as he assumes, that Nature is the great healer; it is true, as he said, that the difficulty of healing very commonly arises from the intrusion of mischievous micro-organisms; and it is quite true that by excluding and destroying these organisms by the 'antiseptic treatment'the anti-putrefactive treatment, that is to saythe natural process of healing is immensely facilitated. The oxygen treatment is a method of warding off the corruptive power of these pernicious bacteria. What the Zulu practice appears to show, and what recent experiments are said very powerfully to confirm, is that the best of all antiseptics is to be found in pure air and plenty of oxygen. They not only kill out unischievous living organisms, but at the same time actually foster and encourage others that are working for the repair of the injury. To supply pure air and oxygen by artificial means, and thus to give Nature the best possible opportunity of doing her beneficent work of healing, is the object of the new system.

Nothing can be much simpler than the system pursued in dealing with wounds, ulcers, burns, scalds, eczema, lesions, and other injuries and affections of legs and arms and hands, backs and heads and faces, eyes and ears and noses. We will suppose that a patient has an ulcerated leg. The limb is merely washed in warm water and laid in a box with a glass side to it, permitting of its being examined from time to time without disturbance, enclosure being effected by means of an elastic covering fitting over the end of the box and round the leg of the patient. Into this glass-sided receptacle a mixture of oxygen gas and air that has been purified by passing through lime-water and Condy's fluid is now gently poured from a mackintosh gas-bag fitted with taps and tubes. That is practically the whole business. There are minor details of management and some variations of treatment that experience has suggested and that circumstances necessitate-a wound may be on the head, and a speciallydevised cap will be substituted for the box; or extensive wounds or sores may be on the trunk, and then a sort of jacket will be requisite. But whatever the details may be, the essential matter is that the flesh to be healed shall be exposed to a mixture of pure air and oxygen in proportions depending on the nature of the affection to be dealt with. What is regarded as the 'standard strength' is a mixture of half oxygen and half air.

The results of this treatment, it seems hardly possible to question, are in a very large proportion of cases very remarkable. It would be scarcely reasonable to expect invariable success. There are some unfortunate mortals whose bodily systems are in so thoroughly corrupt and unhealthy a condition that nothing short of the miraculous could heal them. 'Nature' has no chance with them, and cannot build up sound flesh out of their unsound material. And it would seem that there are sometimes other causes of failure. But where there is any sort of constitution to work upon, the effects of this treatment look to be very surprising. Among the first experiences is the assuaging and cessation of pain. The patients find that from the time the oxygen begins to take effect pain begins to subside, and, generally speaking, within a couple of days or so it entirely dies out-assuming that the case is one amenable to its treatment. All unpleasant smells are similarly obviated, and the most frightful-looking sores and wounds soon begin to put on what surgeons recognise as the signs of healthy flesh formation. Maladies that have resisted all kinds of treatment for years, and in some cases for the greater part of a lifetime, have in the course of a few weeks or months been entirely, and it is believed permanently, healed—so at least it is claimed; and a hospital has been established in London under royal patronage for the treatment of patients upon the new method.



THE AUTOBIOGRAPHY OF A CURLING-STONE.

By T. DYKES ('Rockwood'), Author of Stories of Scottish Sports.



you want me to tell the history of my life, do you? Well, it is far from being eventful; but you are welcome to it. As it is with human beings, I may tell, so is it with stones—some get

it hot like chimney-jambs, some cold; it has been my lot to have it cold, as you can understand.' It was the skip's second stone which spoke-the one with which he often saved the game-and was familiarly alluded to by him as his Old Reliable. Even had we not known it, there was something about him which denoted that he was the property of a laird and Highland chieftain; whilst the others on his own rink were handled by tenants and clansmen; those of the opponents again betokening in everything the shrewd, canny Lowland farmer from the south side of the Forth. His dignified and reserved manner, his high polish, his anxiety to cross at all times the dreaded boundary of hogs and move in the inner circles, the jaunty way in which he gyrated in behind the guards like a ruling-elder to the rear of a kirk plate, readily enough indicated superiority, without his silvermounted handle inlaid with a rich cairngorm.

We were on Carsebreck Royal Pond at the time, and the curlers of the North and the curlers of the South of the river Forth were fighting hard, rink against rink, for supremacy in the annual bonspiel of the Royal Caledonian Curling Club. Snow lay all around, the ice was strong enough to bear a luggage train above, or defy a volcanic eruption from beneath; and, though the east wind blew cold and keen, one might have imagined, from the casting of coats and the up-furling of shirt sleeves, that there was being held a great national garden-party, were it not that the roaring sound of the stones in their passage, and the loud shouts of 'Soop him up,' 'Bring him on,' or 'Weel curled, sir,' rather created the impression that a great Highland foray was being fought out hand-to-hand.

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And so it was, though the broom - besom had taken the place of the claymore, and the curlingstone the targe of bull-hide. At our particular corner hostilities had been suspended for a few minutes, with a view to the dispensation of hospitalities in a truly good old Scottish curling fashion. Conveniently on the tinswept part of the ice stood a large brazier, the flames from the red coals of which kissed and lapped lovingly the round sides of a huge kail-pot or cauldron. From this rose a misty gray steam, the succulent odour of which pierced one to the pit of the stomach, for the interior of the pot was alternately decked and double-decked with good Loch Fyne herrings and smiling murphies which grinned from ear to ear. To the contents the curlers eagerly applied themselves; and, whilst so engaged, I was able to have a few words with Old Reliable.

'Yes, it has been my lot to have it cold, as I have told you, though at the outset I had some warm passages in my career, as I shall relate. To begin, then, at the beginning. I am come of a good old Scottish Lowland familynot Highland, as you might be led to think, for nearly all the stones here are from the Lowlands. I may say I am of the Hones of Ailsa Craig, sometimes called the Red Hones, from the colour of our "striking" or "fighting belts." Our pedigree is of the most ancient; the Loudons of Loudon Hill in Ayrshire and the Basses of Bass Rock in the Firth of Forth, I have heard it said, came into the world on the same day. There are a good many here to-day from Ailsa Craig; but these are mostly of the commoner sort, natives all of that part of the rock which lies close down to the sea; whereas the Hones, which are of a harder and keener grit, belong to the higher strata. Of my early years I recollect very little, save that a puffin—or patey, as they call them in these parts—every year built its nest upon me. One day I recollect I heard a loud noise, and [All Rights Reserved.] JAN. 29, 1898.

day, that's to say when my curlin' days are ower.'

As I had to follow him up and down to catch him when idle at the ends of the rinks, I could well notice that the game was being very closely contested. When the sun began to sink in the west the frost commenced to nip more keenly, causing much greater caution in the delivery of the stone. Old Reliable, the better to act, had shifted to his duller side, and several times just saved his rink by twisting in easily and gently long after he seemed dead beyond all assistance from the brooms. His scientific skill apparently annoyed as well as puzzled our friend from Burnock, who would not admit his superiority, but at the same time declared that he was 'a wonderfully good curler, that is to say for a nobleman and gentleman ye ken.' During all this time the curling storm raged loudly with the roar of passing stones, the plying of brooms, the bell-like echoes of congratulatory cheers, and the sharp notes of complaint. It was now coming near the close of the bonspiel, and all rinks were anxious. Would Ailsa Craig gain the day, or Burnock Water win his pension? I determined to wait and see the result. Both sides were par when starting on what promised to be the last head when the gun fired, and the victor at the end of the last head, when stones were counted, was of course the winner of the day.

Anxious moments these were for all, and in the occasional lulls, when skips were puzzled and pondering, one could mark the soft Gaelic of the Northmen against the hard Galloway, the dour Dumfriesshire, and the broad Ayrshire accents of the South, with now and then the short-clippit words of the men of Aberdeenshire. Far up on the

hillside to the east the finishing gun was loaded, primed, and waiting for the last tick of the expiring period of play.

What promised to be the last end between the rinks between Ailsa Hone and Burnock was contested stone for stone and inch for inch. Still, when the two skips went down to the clamps, Ailsa was lying one shot with a big Crawfordjohn of the third-hand player. To this, Old Reliable, with a beautiful 'elbow in' shot added another, and with the barest glimpse of the winner visible through the only port left, old Burnock's chances of success seemed almost hopeless. To draw gently to it was of little use, as the second stone must still be left, and one only was wanted. If he could catch what was free of it sharply and firmly, the second stone slightly in its right wake would go also, and with both removed Burnock had the victory. I could almost hear the old fellow growling and groaning to be free. At last he was off like a greyhound from the slips, roaring-at least to me this was quite distinct-'Jock Crawford, I have got ye!' Through the port he went scatheless, though close enough to have jammed a snowflake in the passage. There was a rude rock and shock, followed by a wild southern shout of exultation which readily enough proclaimed that Burnock's barn-door pension was secure. Another moment, and a flash of light was reflected from the snow-clad hills. It was the gun. As its echoes resounded through the distant glens brooms were tossed high in air, and loud cheers told of the joy of the victors. The great bonspiel of the year was over, and soon we found on the shore, when the lists were made up, that the men of the South, like tried Old Burnock, had proved victorious.

JOHN BURNET OF BARNS.

CHAPTER X. -OF MY VOYAGE TO THE LOW COUNTRIES.



were aboard on the next morning by a little after daybreak, for the captain had forewarned me the night before that he purposed to catch the morning tide. To one inland-bred the harbour of Leith

was a sight to whet the curiosity. There were vessels of all kinds and sizes—little fishing smacks with brown, home-made sails from Fife or the Lothian coast towns, great sea-going ships, many with strange foreign names on their sides, and full of a great bustle of lading and unlading. There was such a concourse of men, too, as made the place like a continuous horse-fair. Half-adozen different tongues jabbered in my ear, of which I knew not one word, save of the French, which I could make a fair shape to speak, having learned it from Tam Todd along with much else

of good and bad. There were men in red cowls like Ayrshire weavers, and men in fur hats from the North, and dark-skinned fellows, too, from the Indies; and all this motley crew would be running up and down jabbering and shrilling like a pack of hounds. And every now and then across the uproar would come the deep voice of a Scots skipper, swearing and hectoring as if the world and all that is in it were his peculiar possession.

But when we had cleared the Roads of Leith, and were making fair way down the firth with a good north-westerly breeze behind us, then there was a sight worth the seeing. For behind lay Leith with its black masts and tall houses, and at the back again Edinburgh, with its Castle looming up grim and solemn, and farther still the Pentlands, ridged like a saw, running far to

the westward. In front I marked the low shore of Fife with the twin Lomonds, which you can see by climbing Caerdon or Dollar Law, or any one of the high Tweedside hills. The channel was blue as a summer sky, with a wintry clearness and a swell which was scarce great enough to break into billows. The Kern, for so the vessel was called, had all her sail set, and bounded gallantly on her way. It was a cheerful sight, what with the sails filling to the wind and men passing hither and thither at work with the cordage, and the racing seas keeping pace with the vessel. The morning fires were being lit in the little villages of Fife, and I could see the smoke curling upwards in a haze from every bay and neuk.

But soon the firth was behind us, and we passed between the Bass Rock and the May out into the open sea. This I scarcely found so much to my liking. I was inland-bred and somewhat delicate in my senses, so soon I came to loathe the odour of fish and cookery and sea-water, which was everywhere in the vessel. Then the breeze increased to a stiff wind, and the Kern leaped and rocked among great, rolling billows. At first the movement was almost pleasing, being like the motion of a horse's gallop in a smooth field. And this leads me to think that if the boat were but small enough so as to be more proportionate to the body of man, the rocking of it would be as pleasing as the rise and fall of a horse's stride. But in a great cumbrous ship, where man is but a little creature, it soon grows wearisome. We stood well out to sea, so I could but mark the bolder features of the land. Even these I soon lost sight of, for the whole earth and air began to dance wofully before my eyes. I felt a dreadful sinking, and a cold sweat began to break on my brows. I had heard of the seasickness, but I could not believe that it was this. This was something ten times worse, some deadly plague which Heaven had sent to stay me on my wanderings.

Nicol Plenderleith had disappeared almost as soon as he came aboard, and I saw him deep in converse with the sailors. When we had cleared the Forth he came back to me, as I leaned disconsolately against the bulwarks, and asked me how I did. His lean, brown face was not a whit changed by the rocking of the ship; indeed, if he had been astraddle the Saddleback in a gale he would not have been perturbed. When he saw my plight he ran below and brought brandy.

'Here, sir, tak' some o' this. It's tasty at a' times, but it's mair than tasty the noo—it's hale-some.'

'Nicol,' I groaned, 'if I never get home again, I look to you to tell the folk in Tweeddale. It's terrible to die here of this villainous sickness, for I shall certainly die if it continues. Will it never cease?'

'I've been speirin' at the captain, and by a'

accounts we're no' at the warst o't. He says it's juist like the backs o' Leith. If ye win by the Fisherraw ye'll meet your death i' the Kettle Wynd, and if by ony chance ye're no' killed there, ye'll be dune for i' the Walk. He was speaking o' the stinks o' the place and no' the folk, for they're peaceable eneuch, puir bodies. "Weel," says he, "it's the same here. It's ill for some folk to win by the Forth, but it's waur i' the open sea; and when it comes to the Dutch waters it's fair awfu'." I wis, Laird, ye mauma dee.'

This was poor consolation; and had I not formed some guess of my servant's manners I should have been downhearted enough; but there was a roguish twinkle in his eye, and even as he spoke his mouth broadened to a grin.

But, sure enough, the captain's prophecy did not come true. For in a little the waves grew calmer, and my sickness left me. 'Tis true that soon we entered troubled waters once more; but I was fortified with experience and some measure of brandy, and so could laugh defiance at the powers of the sea.

The wind throughout our course was fair in our favour, so we made the journey in shorter time than I had dared to hope for. On the morning of the third day a dense mist shut us in, so that the captain was much confused and angered. But on the wind's rising the fog rolled back, and we went on our way once more. Early in the afternoon we sighted the mouth of the Maas and the tall lines of shipping which told of the entrance to Rotterdam. You may imagine that all this was very strange to me, I who had lived only among hills and rough woods, and had seen the sea but once, and that afar off. 'Twas a perpetual wonder to me to see the great sails moved up and down according to the airt of the wind, and the little helm guiding the great ship. As I have said, I soon got over all sickness, and was as hale as ever, so that on the last two days of the voyage I ever look back as upon a time of great pleasure.

But if my wonder was great in the open seas, 'twas still greater once we had entered the Dutch river. It was all so unlike my own land that the home-sickness which travellers tell of had almost taken hold of me. There were all manner of ships, some little coasting vessels, others huge merchantmen which brought home the wares of the Indies and the Americas. There was such a jabbering, too, in Dutch, of which tongue I knew nought, that I longed to hear one good, intelligible word of Scotch, for which cause I kept my servant near me. By-and-by we neared the quay and saw the merchants' great red storehouses standing in long line, and the streets of the city running back from the river. Here we came to an anchor. Our journey was over, and I had to bid farewell to captain and vessel, and go ashore.

One thing I noted was that the air was somewhat soft and damp, lacking, to my mind, the

acrid strength of the air of Tweeddale, or even of the Lothians. But all the streets were clean swept and orderly; the folk well-groomed and well-looking; and the trees by the river-side gave a pleasant surprise to one accustomed to the grim, gray, narrow streets of the North. I made my way by the help of an inquisitive Scots tongue and the French language to a decent hostelry in the Groote Markt, just opposite the statue (but lately erected) of the great Erasmus. This pleased me much, for to be near even the poor bronze figure of so great a man seemed to lend to the place an air of learning. I employed myself profitably in reading the Latin inscriptions; the others I could make no more of than the rudest ploughboy in Scotland.

Both Nicol and I were up betimes in the morning, that we might get the coach for Leyden, which started almost from the door of our inn. I solemnly set down my testimony that the ale in that same house is the most villainous in the world, for it made us both dismal and oppressed, a trouble which did not leave us till we had taken our seats in the diligence and the horses were starting.

Of the events of that day's journey how shall I tell? Leyden is a day's length from Rotterdam to the north, through a land flat as a girdle-cake. The horses were lumbering, sleepy brutes, and the driver scarce any better, for every now and again he would let them come to the walk for long distances, and then, suddenly awakening to the fact that he must get to his destination before night, get up and shout wildly and feebly flick their backs with his whip. I had much ado to keep Nicol from trying to take the reins from his hands; and certainly if that firebrand had once taken them we should have awakened the quiet countryside, and, God helping us, might even have awakened the driver. I knew nothing of the country, and heard but vaguely the names shouted out by the guard of the coach; yet somehow or other the name of Ryswick clung to my memory, and I remembered it well when, long after, at that place the treaty was signed which closed the war. But at that time the great Duke was plain Master Churchill, and there was no thought of war between our land and France.

It was late in the afternoon when we came to Leyden and rattled down the rough street to the market-place, which was the stopping-place of the coach. This was a town more comely and conformable to my eye than the greater city of Rotterdam; for here the streets were not so even, the houses not so trim, and the whole showing a greater semblance of age. There were many streams and canals, crossed by broad, low bridges. It was a time of great mildness for the season of the year.

It was my first concern to secure lodgings, since I purposed to spend no little portion of my time here for the next two years; and as I had been

directed by my kinsman, Doctor Gilbert Burnet, I sought the house of one Cornelius Vanderdecker, who abode in a little alley off the Breedestraat. Arrived there I found that the said Cornelius had been in a better world for some fifteen months, but that his widow, a tranquil Dutchwoman, with a temper as long as a Dutch canal, was most willing to lodge me and treat me to the best which the house could afford. We speedily made a bargain in bad French, and Nicol and I were installed in rooms in the back part of the house, overlooking a long garden which ended in one of the streams of water which I have spoken of. It was somewhat desolate at that time, but I could see that in summer, when the straight trees were in leaf, the trim flower-beds and the close-cropped lawn would make the place exceeding pretty. I was glad of it, for I am country-bred and dearly I love greenery and the sight of flowers.

I delayed till the next morning, when I had got the soil of travel from my clothes, and myself once more into some semblance of sprightliness, ere I went to the college to present my letters and begin my schooling. So after the morning meal I attired myself in befitting dress, and put Nicol into raiment suiting his rank and company, and set out with a light heart to that great and imposing institution which has been the star of Europe in philosophy and all matters of learning. I own that it was with feelings of some trepidation that I approached the place. Here had dwelt Grotius and Salmasius and the incomparable Scaliger. Here they had studied and written their immortal books; the very place was still redolent of their memories. Here, too, unless my memory deceived me, had dwelt the Frenchman, Renatus Descartes, who had first opened a way for me from the chaos of the schoolmen to the rectitude of true philosophy. I scarcely dared to enroll my unworthy name in the halls of such illustrious spirits. But I thought on my name and race, and plucked up heart thereupon to knock stoutly at the gates. A short, stout man opened to me, clad in a porter's gown, not unlike the bedellus in the far-away College of Glasgow, but carrying in his hand a black staff, and at his belt a large bunch of keys. It came upon me to address him in French, but remembering that this was a place of learning I concluded that Latin was the more fitting tongue, so in Latin I spoke.

'I am a stranger,' I said, 'from Scotland, bearing letters for Master Sandvoort and Master Quellinus of this place. I pray you to see if they can grant me an audience.'

He faced round sharply, as if this were the most ordinary errand in his life, and went limping across the inner courtyard till he disappeared from view behind a massive column.

The man returned and delivered his message in a very tolerable imitation of the language of Casar.

'Their worships Master Sandvoort and Master

Quellinus are free from business for the present, and will see you in their chambers.'

So, bidding Nicol stay in the courtyard, lest he should shame me before these grave seniors (though 'twas unlikely enough, seeing they knew no Scots), I followed the hobbling porter through the broad quadrangle, up a long staircase adorned with many statues set in niches in the wall, to a landing whence opened many doors.

At one of them my guide knocked softly, and a harsh voice bade us enter.

'This is Master Sandvoort,' he whispered in my ear; 'and I trust he be not in one of his tantrums. See ye speak him fair, sir.'

I found myself in a high-panelled room, filled with books, and with a table in front of a fire-place, whereat a man sat writing. He wore a skull-cap of purple velvet and the ordinary black gown of the doctor. His face was thin and hard, with lines across the brow, and the heaviness below the eyes which all have who study overmuch. His hair was turning to gray, but his short, pointed beard was still black. He had very shaggy eyebrows, under which his sharp eyes shone like the points of a needle. Such was Master Herman Sandvoort, professor of the Latin language in the ancient College of Leyden.

His first question to me was in the Latin:

'What tongue do you speak?'

I answered that I was conversant with the English, the French, and the Latin.

'Your letters, pray,' he asked in French; and I took them from my pocket and gave them to

'Ah,' he cried, reading aloud, 'you desire to study in this University, and improve your acquaintance with certain branches of letters and philosophy. So be it. My fee is five crowns for attendance at my lectures. I will not abate one tittle of it. I will have no more poor students come cringing and begging to be let off with two. So you understand my terms, Master Burnette.'

I was both angry and surprised. Who was this man to address me thus?

'I pray you to finish the letter,' I said curtly. He read on for a little while; then he lifted his head and looked at me with so comical an expression that I had almost laughed. Before, his face had been greedy and cold; now it was worse, for the greed was still there but the coldness had vanished and left in its place a sickly look of servility.

'Pardon me, pardon me, good Master Burnette; I was in a great mistake. I had thought that you were some commoner from the North; and, God knows, we have plenty of them. I pray you forget my words. The college is most honoured by your presence—the nephew, or is it the son, of the famous Doctor Burnette. Ah, where were my eyes—— The lord of much land, so says the letter, in the yalley of the Tweed. Be

sure, sir, that you can command all the poor learning that I have at my disposal; and if you have not already found lodging, why, if you will come to my house, my wife and daughters will welcome you.'

I thanked him coldly for his invitation, but refused it on the ground that I had already found an abode. Indeed I had no wish to form the acquaintance of Frau Sandvoort and her estimable daughters. He gave me much information about the hours of the lectures, the subject which he proposed to treat of, and the method of treatment; nor would he let me depart before I had promised to dine at his house.

Outside the door I found the porter waiting for me. He led me across the hall to another door, the room of Master Quellinus, the professor of Greek.

Here I found a different reception, A rosycheeked little man with a paunch as great as a well-fed ox, was sitting on a high chair, so that his feet barely touched the ground. He was whistling some ditty and busily mending his finger-nails with a little knife.

'Why, who have we here?' he cried out when he saw me. 'Another scholar and a great one. Why, man, what do you at the trade, when you might be carrying a musket or leading a troop of pikemen?'

I was tempted to answer him in his own

'And what do you,' I asked, 'at the trade, when you might be the chief cook to the French king, with power to poison the whole nobility?'

He laughed long and loudly. 'Ah, you have me there, more's the pity. But what though I love my dinner? Did not Jacob the patriarch, and Esau—the mighty Esau—though I have little credit by the example? But come, tell me your name, for I begin to love thee. You have a shrewd wit, and, what is more, a pleasing presence. You may go far.'

I gave him my letters, and when he had read them he came down from his perch and shook me by the hand.

'You are a Scot,' he said. 'I never knew any Scot but one, and he was hanged on a tree for robbing the Burgomaster's coach. I was a lad at school, and I mind me 'twas rare sport. So I have a kindly feeling for your nation, though may God send you a better fate than that one. But what do you seek to learn? Greek! Faugh, there is no Greek worth straw save Anacreon, and he is not a patch upon our moderns, on François Villon of Paris, whose soul God rest! and our brave Desportes. Philosophy! Bah! 'Tis all a monstrous fraud. I have sounded all the depths of it, and found them but shallows. Theology! Tush, you will learn more theology in an inn in the Morschstraat than in all the schools. Such are my beliefs. But God has compelled me, for

my sins, to teach the Hellenic tongue to a perverse generation at the small sum of five crowns. We study the *Republic* of Plato, and I trust you may find some profit. You will dine with me. Nay, I will take no denial. To-night in my house I will show you how a quail should be dressed. I have the very devil of a cook, a man who could dress a dry goatskin to your taste. And wine! I have the best that ever came from

the Rhineside and escaped the maw of a swinish Teuton. You will come?

I could only escape by promising, which I did with a good grace; for if there was little profit in Master Quellinus's company, there was much pleasure. But I was come prepared to find much that was strange, so I looked forward to their lectures without distaste.

(To be continued.)

A RAMBLE IN MUSCAT.*

By JOHN FOSTER FRASER.



AM writing this in mid-winter, though the thermometer registers 92 degrees in the shade. I am in the flimsiest of pyjamas, and a long drink in a long glass stands at my elbow. I feel every pore in my

body perspiring, not streamingly or uncomfortably, but producing the sensation of a hot dew. And I am sitting on the deck of a steamer, with the heaviest of awnings overhead, and look as through a window from a darkened room on a glare that aches the eyes. There is a pulsing, hot breeze that makes me stretch my arm for a long gulp at the long glass.

It is a warm afternoon, and passengers are sprawling in hammock-chairs. Every one is armed with a book; but all books are lying face downwards on their owners' knees. Heads are thrown back; hats are pulled forward. I do believe everybody is sleeping. Certainly a lady missionary, going home for a rest, is doing what no lady missionary should ever do—she is snoring.

I would like to toss this pen aside, and stick these uninked sheets of paper in my case. After lunch it is delightful to slip into the luxury of being lazy till ten and biscuits and toast and cake are brought round by the mummy-faced Portuguese steward. But there is a Spartan heroism in keeping awake on such a day, when dropping to sleep would be so agreeable. I know I am writing only to keep awake. Just this moment I caught myself trying to write three words between every snore of the missionary, and became cognisant there was a contest by the discovery I was lagging behind.

We are lying off the coast of Arabia, in the shelter of grim rocks that run into the sea like jimu's arms, and in the cove, piled in a heap, like a mound of promiscuous bandboxes, are the white houses of Muscat. To look at them is as hard as gazing at a looking-glass which is doing its best to crack. They seem about ninety million miles

nearer the sun than they have any right to be. To gaze at the dazzling whiteness is to provoke a headache.

The big white house, with the big green shutters and the maroon-painted balcony and the birdeage smoking-room on the top, is the Palace of the Sultan. I think myself clever at most things; but I would never have taken that barn for a palace had I not been told and had pointed out to me a flipping, flapping strip of red cotton serving the duty of flag. There are other flags. The Tricolour is rather limp; the Union Jack flutters and drowses and then flutters again as though it were uneasy about something; the Stars and Stripes is positively frisky, dancing away in some particular breeze of its own.

Muscat is a difficult place to reach. But having reached it, your next solicitude is to get from it. It is much heard of but seldom seen, stuck on the fierce scorching Arabian coast, and crouching where the rocks-high, jagged, and wolf-toothedsurround and protect it. If you are a wild Bedouin from the desert, coming with slender but deadly musket in your hand and plunder in your heart, you must crawl through a narrow, black defile. If you are a Londoner who just drops into Muscat for breakfast, on your way from anywhere to somewhere else, you must pass within those jinn's arms that are covered with towers like horrible warts. This morning I counted twenty-two of them. One, a little the worse for wear, stands close to the sea, and was built in the year fifteen hundred and something by the hardy, venturesome Portuguese. Half-a-dozen towers are up on the rocks, hanging close to the edge, showing how near they can get without toppling over. Narrow precipitous steps cling to the hillside on their way to the fortresses. The fortresses are formidable enough, and might do damage were piratical dhows to sweep into the harbour of those devils' arms, to carry off the gold in the sultan's treasury or the treasures in the sultan's

The sea is deep and bluish-green, and ships can lie close to the rocks. This afternoon the water is bobbing and heaving, and the crests of the

^{*}The author of this article started from London in April 1896 on a bicycle tour round the world. This records his experience of Muscat.

waves are breaking into silvery fringe. Native boats are curtseying in the harbour—curious-shaped things, resembling a pea-shell, and as seaworthy. They are long and shallow, and the billows throw them about in ungentle fashion. Unless you are a heedless wretch your heart and your throat play cup and ball every time there is a lurch. You shut your eyes anticipating the drowning of six men, and open them expostulatingly on understanding there is to be no drowning.

Only a few of these boatmen are Arabs, swarthyskinned, keen-featured, quick-eyed. Most of them are negroes, captured in slave-dhows on the Zanzibar coast. There were three men in the pea-shell that took me ashore and brought me back again. I sat on the floor, while the negroes sang crooningly as they swished the boat from wave to wave. They used paddles of bamboo, with a round piece of wood like the top of a barrel at one end. The man who was perched in the stern steering with his paddle sang through his yellow, evil teeth. There was as much play of feature in his countenance as you notice in a rhinoceros. He was naked, save for an orange-coloured cloth around his loins, and his skin was scorched and baked and cracked, and baked again, till it had really the resemblance of rhinoceros-hide. His lips were an inch thick and the lower jaw hung. A jaundiced, sullen eye stared ahead with never a quiver of the lids, blood-streaked, lacking vitality, but with an infinity of despondence and kismetic gloom in its depths. A loathsome scar stretched from the ear over the cheek-bone to the lips, telling of a fearful sword-slash. Three deep furrows lined his brow. He struck me as a curious animal. He was, indeed, little more than an animal. When I paid him he never said a word.

I think there can be no stout men in Muscat. When I walked through the streets with my hands in my pockets my elbows scraped either wall. Had I been a particularly tall man I would have rubbed the sides of my hat, for the buildings leaned over with an evident intention of meeting. But they thought better of it. In all my Eastern travels I have never seen such narrow ways. They look all the narrower because the houses are so tremendously high, and the sky is a streak of blue resting on the house-tops. The consequence is, there is no sunny side to the street; it is all shady. Twenty feet up latticed balconies overhang. All the doors are heavy and formidable, and iron-studded and iron-barred.

Here, in Muscat, I saw the pure-bred Arab man, sinewy but not tall, a domineering, swaggering nobleness in his glance, and a brace of daggers in his waist. When I recognised a beautiful haft or noticed a slender inlaid native gun or singular shield, I offered to buy. But nothing would induce them to sell. 'Sahib,' said one man, 'I killed my deadliest foe with this blade, right

through his black heart! You see this dint in my shield. Ah! that dint was caused by a spear. The shield saved my life; shall I, then, sell it for money? My gun? No, sahib! I am an Arab, and my gun is my other self. How could I be an Arab if I had no gun? This sword—it belonged to my grandfather. It has killed forty men. By Mahomet! it is true. These marks, sahib—you see these marks—only one of these marks is put there when a man is killed. I offered three times the value. The answer always was, 'No, sahib, I will not; I cannot.'

Everybody, from the frolicsome boy of eight to the tottering imbecile of eighty, carried a weapon. The old men had rusty swords that reminded me of the unwieldy double-bladed monsters that Richard Cœur de Lion and his knights swung in the face of the Saracens. These Muscat swords are four feet six inches long, the blades three inches wide, and the handles provide room for both fists to grasp. Law is an unknown quantity in Eastern Arabia. It is a case of every man for himself. A month or two back the wild tribes of the desert, armed literally to the teeth, entered Muscat, ostensibly to sell dates. At a signal they made a dash at the bazaars and ransacked them from end to end. The Muscatees showed fight, and a good deal of blood was spilt at the streetcorners. The invaders were victorious; and the sultan, taking shelter in one of the forts, had to ransom his life and his capital. The nomads enjoyed a great feast; and then, firing their guns in the air, sprang into their saddles and sped over the hot sand towards the interior. The sultan is a young man of thirty, practically a protégé of the Indian government, from whom he receives £6000 a year on the understanding that he does not interfere with Zanzibar. From all I hear he is an illiterate ninny, with no higher ambition than adding to his crowd of wives. The only way to do business with the sultan is, first of all, to present him with a couple of pretty girls.

Yesterday and to-day I have been rambling through the maze of rickety shanties called the bazaar. It is labyrinthine; you dive down dark alleys, not knowing where they lead you. Sometimes they lead into another alley; sometimes they lead to a blind wall. Every shop is an alcove piled up with dusty wares. Plenty of people are about, but there is little business. The hues of the men's robes are wonderfully gorgeous, of purple satin, canary satin, green silk; and the turbans are marvels of snowy whiteness. There is a flabbiness about the merchants by no means Arab-like. They have sensuous, slothful eyes. As I passed along they gave no sign of curiosity; but they held their nostrils tight, that the smell of an infidel dog might not disturb their complacent self-sufficiency. They are convinced they are the ornaments of the universe; they will not believe any city surpasses Muscat in magnificence; their sultan is the greatest monarch on earth. If you think you can alter their ideas by demonstration you know little of the workings of the Eastern mind.

The women wear a garb which is distinctive from that of other Easterns in general effect though not in detail. Whilst the men don brilliant robes, the women put on brilliant trousers, a sort of compromise between knickerbockers and breeches, and above is a loose waistcoat of velvet with big buttons; but in the streets this is often hid by a long enshrouding black shawl. They do not cover their faces entirely as the Persian women do, nor do they hide the lower part of the countenance according to the custom of the Egyptians. They obey the Koran law of hiding the features, but the hiding is perfunctory. Around the head, and, consequently, stretched over the face, is a black cloth with holes cut to see through, another to breathe through, and a fourth, if necessary, to sneeze through. These holes are frequently quite large; and, instead of the woman being a mystery, I could always tell at a glance whether she was young or old, ugly or beautiful. Around their ankles are big silver bangles; other bangles jingle on their wrists; heavy-loaded weights shake from the lobes of their ears, and from their noses dangle rings.

Certainly, as I strolled from spot to spot, and got lost, and found myself again, I was struck with the gaudy, turbulent scene—the sleek merchants, the bold and armed nomads, the naked negroes carrying assegais, little boys staggering under the weight of heavy swords, the women balancing jars upon their heads, the throng of importuning beggars, the story-tellers, the rows of blinking loungers squatting along the wall-sides—a scene singularly fascinating, not only because it was curious, but because it was a spot of the world about which the rest of the world

knew little.

Muscat is very much like a boy when he has outgrown his clothes and long pieces of him stick out at the sleeves and trouser-legs. Muscat has outgrown its boundaries, and through the city gates pieces of it protrude. Houses are not much of a necessity. Indeed, I don't think I saw a house outside the gates. What did duty was a

sort of matting roof, enough to keep off the sun's rays, and beneath this the family lie. Some sort of privacy is obtained by a rude kind of rush palings fixed around. But it is primitive.

I walked beyond the town and up the rocky gorge, the only entrance from the desert to the town, and, reaching the mouth and looking beyond, I saw an entrancing sight. It was evening, and there was a mellow haze in the air, and the sky was flushed with orange and purple, so that nature wrapped the picture in a shimmer of romance. It did not look real. I had seen it all before, but only in my mind's eye, as a youngster reading with heated imagination the trials of Robinson Crusoe or poring over the marvels of Treasure Island. Immediately in front spread a small sandy plain dotted with stunted huts and lofty palms. Beyond was a creek edged with verdant luxuriance, and great masses of deeptoned trees climbed up the opposite slope. But it was the creek that riveted my eye. I fancied myself in some far-off South Sea island. Had a canoe filled with painted savages slipped along, and had they landed and lit a fire and cooked an enemy on it, and then eaten him. I should not have been surprised.

On my way back I came across six little nigger boys sitting in a row. They were mischievous rascals, shaven-headed and scantily clad. They were all one size, so I inquired where they came from. A few months ago the British gunboat Sphina was prowling down the Zanzibar coast, and captured a couple of dhows packed with slaves. Among the slaves were forty boys, all about eight years of age, and these were brought to Muscat, and most of them placed under the protection of the consulates.

Phew! it is terribly hot as I sit here writing, with Muscat half a mile away quivering in the heat. The missionary lady has ceased her snoring, and I see she is gazing at me curiously. Perhaps she is wondering what makes me write during the scorching hours of the afternoon. And really I wonder too.

Any way, I have finished my long drink in the long glass. And here comes the mummy-faced Portuguese with tea.

JUST AN EPISODE.

CHAPTER III.



DID not see Mimsy at lunch, though I heard her come back. Harry was not with her, and the dismounting was performed in silence. I could not spare time to go into the dining room, so Harris brought

some food into my private room, and I snatched a mouthful when I could. After that I had to

go to the hospital, and it was not until dinner was served that I saw her again, and then her expression conveyed nothing to me. She was very quiet, of course. A young person receiving an offer of marriage for the first time might naturally be subdued, whether she had accepted it or not. She toyed with her soup, and barely tasted the daintiest morsel of grouse I could find to send her. Once,

when I caught her eyes for a moment, I saw an expression of pain in their blue depths, but the meaning of it I could not fathom. Dinner over, she wandered through the window on to the terrace, as she had done in the morning; but then she had been bathed in sunshine, now the shadows were falling across her. I could not help making the comparison, and a pang went through me. Was this prophetic? What ages ago it seemed since she stood there feeding the pigeons!

She crossed the terrace and sat perfectly still on the balustrade, leaning against one of the stone pillars, her head slightly bent, her hands hanging listlessly down. The despondency of her attitude touched me painfully; and, instead of leaving her to tell me what she would in her own time, as I had intended, I went out and joined her, standing quite unheeded close by her side. Only this morning and she would have jumped up to meet me, or turned and seized my hand, or leaned against me with a mute caress. Now she remained apart, quite still. This was the beginning of the change, then; and I must confess that, in spite of my resolution to give her to Harry, I did not relish having our old relations upset in this way. Perhaps she too felt this.

'John,' she said at last, without looking at me, 'how much money have I of my very own?'

She had accepted him, then, and now business must be discussed.

'You have eight hundred a year.'

'And is it settled on me?'

'Yes, settled on you absolutely.'

'So that, if I like, I can set up a house of my own and live all by myself?'

'Yes, when you are of age.'

'Who settled this money on me, John?'

'I did.'

Why?

'Because, in the event of your marriage, I considered it well that you should have complete control of your money affairs.'

'You seemed to be quite sure I should marry?' I nodded.

'I thought it possible.'

Mimsy was silent for a long time. Then she And: 'Does Priscilla know?'

'Yes; Priscilla agreed with me.'

'Does Priscilla want to get rid of me too?'

'I don't understand you, dear child; no one wants to "get rid" of you.'

Another pause. Then:

'John.'

Now it was coming. Prepare yourself, John Travers, for a stinging blow. I braced myself up.

'Yes, Mimsy.'

'This morning Harry asked me to marry him.'

'And--?'

'And I said I couldn't. And then I was miserable, because I hated to hurt Harry, and he looked so unhappy. And then he said you would be glad if I married him'—(the deuce he did! Harry had

taken a great deal too much for granted there)—
'and that made me more miserable.'

'Why did it make you miserable, Miriam?'

'It hurt me to think you would be glad to get rid of me.'

'I could never be glad to lose you, little one.'

'Then why did Harry say that?'

'I think I can explain it. Harry obtained my consent to speak to you of his love (and I believe he loves you very dearly); and, having gained that consent, he naturally supposed it given with a certain amount of pleasure.'

'Which it was not?'

'Which it most decidedly was not.'

She gave a sigh of relief.

'I'm glad of that. It hurt me dreadfully, John, like a sharp stab would do.'

'Why, sweetheart,' I said emphatically, 'you cannot suppose for one instant that it would be a pleasure to me—and to Priscilla' (I thought I had better put that in)—'to know that our nestling might choose to fly away, perhaps to India, with Harry, and take all the sunshine from our home, leaving it desolate without her. Life would never be the same again'—— Then I checked myself; it seemed to me I might go too far:

'And how did it end?' I went on, as she made

no comment.

'It ended like this: Harry asked me if I cared for any one else, and I said yes.'

Good gracious, the child! She closed one wound only to open another. Who was this man for whom she cared? That she had many admirers I knew, but it had always seemed to me that she treated them all alike, as comrades and friends.

'And this man, Mimsy; does he care for you at all?'

'Yes,' wistfully; 'he cares for me. He does not love me.'

'How do you know that?'

'Because, if he did, he would have asked me to marry him.'

Very young, amateur reasoning that.

'And if he did ask you, would you marry him?'

'Yes, to-morrow.'

'With all the love on your side?'

'Yes; I love him; that is sufficient. I told Harry so.'

I was a little bit disappointed in Minsy. I had thought her so different. And here she was, ready, at a moment's notice, to throw herself at the head or into the arms of a man who, she confessed, did not love her. And telling Harry, too! I could only gasp: 'You told Harry?'

'Yes; and I told him who it was.'

Worse and worse!

'My dear child, you shouldn't have done that.

What did he say?'

'He looked very much surprised, and said, "Then I haven't the ghost of a chance. I won't bother you any more, Mimsy." And then he went home, and I came on with Jenkins.'

Here was a pretty kettle of fish! Poor Harry! It was bad enough to have to bear a refusal and the dashing of all his bright hopes to the ground; it was harder still to be calmly told of a rival, not only preferred before him, but loved, it seemed. I had felt sorry for Harry before, now I felt more sorry; I had a fellow-feeling for him. And poor Mimsy! This, then, was the cause of her depression. To care for a person who does not return your love, that is hard too. Ought I to invite her confidence further? I was sorely perplexed. Not for worlds would I have hurt the child, or made her trouble any worse to bear than it was already. And yet, if I knew more, I might be able to help her. Here she was, loving a man who perhaps had no intention of asking her to be his wife. I was gradually working myself up into a perfect fury of rage against this unappreciative loved one, when Mimsy slowly rose, and stood, for a moment, looking away into the west, where, across the valley of the town as far as we could see, the earth-line was slowly rising above the sun. Not once had she made a movement towards me, she whose nature was so affectionate, who had always been so lavish of her caresses. I missed them now. I scarcely dared to think of what life would be to me without them. Ah, yes, since the morning, how she had changed! Then she was a child; now she had crossed the boundary-line, and the old, free affection could never be ours again. A sudden mad desire came over me to take her in my arms and hold her so that never should the breath of other love come near her. Was it the pent-up longing of years breaking loose at last? But between us there glided the shadow of that other man, the man whom Mimsy loved, and my half-outstretched arms fell down. And still she stood there apart from me, her eyes travelling among the familiar objects around us and lingering on them with a pathetic sadness, as if she were taking a last leave. I could bear it no longer.

'Minsy,' I said, as calmly as I could—for my heart was beating rapidly, sending the blood tingling through my veins—'tell me, who is this man

who is taking your love from us?'

As she turned and looked into my face, I saw in her eyes the glistening of tears. They glistened, but they were bravely kept back. The sight maddened me.

'Quick, Mimsy; tell me.'

'I cannot tell you,' she said very softly, 'but you shall see his photograph. I always carry it with me.' Here she took from her pocket a little, thin, well-worn leather case, which she placed in my hands. 'I am going indoors now,' she continued, 'and I want you not to open it until you are quite alone. And when you have seen the face, it will be good-bye between us for ever, dear, dear Guardy, for I can never, after that, continue to live with you here.'

I sat down and watched her move slowly over the grass, a pathetic figure passing gently from me into the unknown future. At the window she turned and waved her hand. I am not ashamed to say that in my eyes the tears were swimming. I still held the little leather case tightly grasped in my hand, and as she disappeared I nerved myself to a final effort. I opened it, and as I looked I sprang to my feet. There before me was an old and faded photograph of—myself.

CHAPTER IV.



REACHED Mimsy before she crossed the hall. I drew her into the consulting-room—that room from whence, only that morning, I had driven

only that morning, I had driven her to Harry. I took her in my arms and kissed her again and again on her soft hair, for her face was hidden on my breast. I thought with a smile of my morning's resolution, and in imagi-

nation I snapped my fingers at it.

.'Mimsy,' I whispered, 'will you marry me, and stay with me always, the one dear, sweet love of my life? You whose every tone is music to me, whose every footfall makes my heart rejoice. Listen, I have tried hard to give you up. I have shrunk from asking you to bind your fresh young life to a man old enough to be your father. I knew Harry loved you, and when I sent you to him this morning, it was with an ache at my heart that has refused all day to be stilled. I could not dare to think that you cared for me otherwise than as your friend and guardian. Now that I know, I will not part with you to any man living. You shall be mine irrevocably, irretrievably if you will. Will you, Mimsy?'

I sat down in my own particular chair—the chair from whose majestic proportions I daily (I hope) impressed my patients with a sense of my profound knowledge and skill; and Mimsy nestled in my arms, holding one of my hands tightly in both her own.

'I am ever so willing, Guardy; but I cannot realise my happiness yet. It has come so suddenly, just when I had made up my mind to go away and

leave you.'

'That wasn't kind, Mimsy.'

'No; but I never thought of that then.'

We talked until sounds of a tray being carried into the drawing-room reminded us of something we had both forgotten.

'That is the coffee going in,' said Mimsy, springing up. 'I had forgotten Priscilla.'

I rose and took her hand.

'Come, we will go and tell her.'

Priscilla was knitting by the fire. She looked at us keenly as we entered, her eyes resting first on me, and then on Minsy, who, clinging fast to my hand, hung back shyly. Then Priscilla darted at me.

'John, you don't mean?'- she began.

'Yes, I do, Priscilla. I mean that Mimsy and I are tired of being guardian and ward, so we are changing the relationship, and are going to be husband and wife instead.'

Priscilla drew my face down to hers, and, as she had often done when I was a boy, pressed her lips to my forehead in a long, loving kiss. Then she turned to Mimsy, and folded her in her arms. 'Oh, my darling, I am so glad, so glad!' she murmured, as she cooed over her; 'it is what I have longed and prayed for, and now it is really come. John, I saw how it was with you, and I was afraid you would not speak; I feared that your grand quixotic notions would keep you from your happiness, while all the time this child was eating out her heart for you, and you did not see it, and I could say nothing. You have given me many an anxious moment, especially when this morning I thought you were willing that Harry should take her away. But, there, it's all settled now, so let us have some coffee. I am sure we need something after all this excitement.

CHAPTER V.



ARLY the next morning I heard Mimsy's voice from the garden singing:

'John Anderson my jo, John, When we were first acquaint,'

and I knew that she had recovered her usual spirits. When I joined her a short time after, she was flitting from bush to bush gathering roses—for the consulting-room, she said; and then added, with a furtive glance into my face: 'I am not going to hate the patients any more now; I can even afford to respect them.'

When the basket was full she suggested: 'Don't you think, darling, we might find Jenkins and tell him? He seems to belong to me somehow.'

So we wended our way to the stables, Mimsy, with all her old gaiety and light-heartedness restored, dancing along by my side.

Jenkins was an old soldier. He had served under Mimsy's grandfather. He was with her father when he died of sunstroke in India, when Mimsy was born. He brought her mother home to England, and when she died a few years later he came to me with the little one, her devoted servant and slave. He was in the act of wringing out a leather from a pail of water when we appeared, and when he caught sight of us he drew himself up sharply to attention, his hand to his cap.

'I'm going to be married, Jenkins,' announced Mimsy without preamble.

'Well, to be sure, Miss,' replied Jenkins, looking inquiringly at me; 'well, to be sure.'

'Yes, Jenkins; and to the very best man in all the world.'

'Yes, Miss, yes;' and again he glanced at me.

'There he stands before you, Jenkins; and just think of it, I'm going to be Mrs Travers, and never, never going away from the dear old home.'

'I'm very glad, sir, that I am. I knowed Miss Miriam she worshipped the very ground you trod on, sir—and you deserve it, sir; and I knowed what store you set by her, sir. And now I'm as glad as ever I can be.'

'John, darling,' said Mimsy as we strolled back to breakfast, 'I've been thinking of lots of things since yesterday, and I do hope Priscilla will live here with us, always.'

'No, sweetheart. Priscilla confided to me last night, when you had gone to bed, that she would like to carry out a project she has always had in her mind in case I married. She would like to have a little house near, and see us often, and yet be quite quiet and independent.'

'But need we let her go, John? I want to keep her.'

'I know, little one; but Priscilla thinks you ought to rule here with an undivided sway—be a sort of queen, in fact. She has nothing but praise for you, Minsy, and thinks you will make an excellent housekeeper. Priscilla is a wise woman; and, somehow, I fancy we shall do well to be guided by her.'

We stood for a few moments on the terrace, and the pigeons came and coold around Minsy as she apostrophised the garden and its belongings; 'You dear old garden! And you sweet flowers and trees and grassy walks and shadows and sunshine! I said good-bye to you all yesterday, and you would not respond. And now I know why: you never meant me to leave you.'

THE MONTH: SCIENCE AND ARTS.

THE NEW ADMIRALTY HARBOUR.



WORK of national importance is about to be commenced at Dover in the construction of a harbour, with an area of more than 600 acres, sufficient to afford protection for the whole of the vessels comprised in

the Channel Squadron. This necessary enterprise has been under consideration for many years, and as long ago as 1844 a royal commission reported in its favour. But we all know that such recommendations generally remain a dead letter for an indefinite period. This was certainly the case in this instance, for nothing was done to act upon the report until in 1886 a bill was introduced to construct a national harbour at Dover at a cost of two millions. With some modifications this scheme is now to be adopted; but the estimated cost is now three and a half millions. It need hardly be said that the works are of a most extensive kind,

They comprise an extension of the existing Admiralty Pier; the construction of a somewhat similar pier to the eastward; a breakwater more than 4000 feet long, forming the southern wall of the harbour; and the building of a sea-wall of nearly the same length. The works to be constructed will represent in the aggregate a length of more than 21 miles; they will be of enormous strength, and will consist mostly of concrete blocks, faced with granite, of a weight of from thirty to forty tons each. Measured from base to parapet, the walls of this harbour will be ninety feet in height, nearly seventy feet being below water at spring-tides. It is expected that the new harbour-the centre of which will be just under Dover Castle-will be completed in about ten years.

A RAILWAY-TICKET PRINTER.

Few railway travellers give thought to the enormous amount of clerical work involved in the distribution and checking of tickets, the consumption of which by a big company amounts to about a million per week. A clever machine has lately been adopted by the French railways, and is now being introduced to British notice, which does much to simplify this work, and at once dispenses with the help of the usual central office from which tickets are now issued. The machine is under the care of the booking-clerk, and prints, dates, and numbers the tickets as they are applied for by the passengers. The principal feature of the machine is a wheel, on the circumference of which is engraved the names of the various stations; and when this is turned until the name of the required place comes opposite to a pointer, the touch of a certain lever will print the ticket. If the lever be held down, tickets of the same denomination, serially numbered, will be thrown out at the rate of 100 per minute. At the same time a record of every ticket printed will be made on a slip of paper, automatically, which is contained within the machine, and can only be got at by the official entrusted with the key. There is thus a constant check upon the booking-clerk, whose receipts can at the end of the day be compared with the registration slip. The machine is said to require no attention beyond the daily change in the datestamp, inking of the rollers, and occasional renewal of the rolls of cardboard from which the tickets are cut.

A NOVEL RAILWAY SCHEME.

At a time when the relative advantages of steam and electricity as motive-power for railways is being much discussed, a method of propulsion which dispenses with either is certainly of interest. In Halford's patent railway the force of gravity is the sole motive-power employed, assisted by hydraulic rams. In the model which has been made, and which works very well, the

railway is in sections, the rails being raised on columns, and the cars suspended on either side below them. At the junctions the sections are hinged together, and at these points can be raised by hydraulic rams. This raising of the track with a train upon it forms a gradient down which the cars rush until the train arrives at the next junction, when the same raising process is effected with like results, and so on until the terminus is reached. It remains to be seen whether such a system can be worked satisfactorily on a larger scale, and whether it will prove more economical than existing methods of propulsion.

HISTORY REPEATS ITSELF.

We have all read with pride of the brave Highlander who, at the action at Dargai, continued to play his pipes although he had been shot through the legs. A correspondent of the Times points out that a similar incident, recorded in The Life and Exploits of His Grace the Duke of Wellington, occurred at the battle of Vimiero about ninety years ago. It is thus described: 'An incident occurred in this battle so highly characteristic of Highland courage that we cannot refrain from quoting it. It is very common for the wounded to cheer their more fortunate comrades as they pass on to the attack. A man named Stewart, the piper of the 71st Regiment, was wounded in the thigh very severely at a very early period of the action, and refused to be removed. He sat upon a bank playing martial airs during the remainder of the battle. He was heard to address his comrades thus: "Weel, my bra' lads, I can gang nae langer wi' ye fechtin, but de'il burn my saul if ye want music." For this the Highland Society justly voted him a handsome set of pipes, with a flattering inscription engraved upon them.'

WHALE-FISHING.

The whale-fishing at Newfoundland during the past season has not been very successful, for only one animal was secured by the five Dundee vessels engaged in the enterprise. On the other hand, the capture of the walrus-the hide of which has lately been marketable-was prosecuted with better results. The best catch of the season was that of the ship Balæna, which secured 600, and other vessels killed from seventy to eighty each. The three vessels which proceeded from Dundee to Davis Strait did far better as regards the whale-fishing, for they secured among them no fewer than eight whales, against three killed during the preceding season. At present quotations the bone secured will realise about £12,000, and the oil about £2000, estimating the latter at £20 per tun.

AFRICAN COFFEE.

The results of working a coffee estate in British Central Africa have lately been published for the benefit of those wishing to embark in that industry. This takes the form of a balance-sheet of the plantation belonging to Mr S. Israel, who arrived in that country in June 1894. Five hundred acres of land cost him £175, to which must be added £2000 spent during the three years in the erection of buildings, planting of shade trees, &c. Sixty acres planted with coffee brought a return for one year of nearly £1500, and a valuation of the estate shows it to be worth £4500. For the next year the estimated return is over £2000, with an expenditure of little more than a quarter that sum; and for 1899, when many more acres will come into bearing, Mr Israel reckons on a revenue of £3000 with the same outlay as in the previous year. Very few new planters have made their appearance during the past year, owing to reportswhich are greatly exaggerated—as to the unhealthiness of the country.

THE DANGER OF 'FIREPROOF' BUILDINGS.

The recent great fire in London, which laid so many houses low, has done good service in calling attention to the utterly false security promised by so-called 'fireproof' buildings. The buildings are so far fireproof that the materials used in their construction-iron and concrete-will not take fire. But what happens when such a structure is stored with highly-inflammable goods should such goods become ignited? The building acts like a fireplace, its numerous staircases, liftshafts, and windows acting as flues, until its interior is one mass of glowing heat. Then the heat acts upon the iron girders, causing them to lengthen by several inches and to exert an outward thrust upon the walls, which speedily brings them down. Good, strong, old-fashioned oaken beams are far safer, for they take a long time to burn through, and they do not elongate by the action of heat. It is obvious that there is room for great improvement in our methods of building construction in view of risk from

STEAM FROM ELECTRICITY.

A demonstration was recently given at Birmingham by the Electric Steam Syndicate of a system patented by Major J. H. Dunn for converting electricity into steam. So far as we can gather from the published accounts of this demonstration, it would seem that the tubes of a steam boiler have passed through them wires which are made white-hot by their resistance to the passage of an electric current. We read that at first the patentee made use of platinum for this purpose; but as that metal is nearly as costly as gold, it is obviously out of the question, and he has since 'discovered a metal which is only fifteenpence a pound, which answers the purpose.' We confess that we do not see how such a system could be worked except at ruinous loss, unless Major Dunn has discovered, as well as the new metal, an unprecedentedly cheap method of generating an electric current. For the most economical method at present available—with the exception of a natural head of water as at Niagara—is steam power. And to attempt to make a current so generated produce more steam than that which gave it origin is very like trying to get a quart of liquid out of a pint pot.

ARTIFICIAL STONE.

The Owen Stone Company of Scotland are now manufacturing an artificial stone which is said to stand every test, and to be impervious to all vagaries of the weather. The process is a simple one, and the ingredients of the stone, chiefly lime and sand, are not expensive commodities, so that it is believed that the artificial product will be able to compete with the real. The lime and sand, having been thoroughly incorporated, are passed into moulding boxes, which may be of any convenient size or shape, and these are placed within the converter. Water at high pressure, and having a high temperature, is then pumped into the converter to cause the necessary chemical union between the lime and sand, and the moulding boxes are also submitted to a temperature of about 400° Fahrenheit by the action of superheated steam. In about thirty hours the surplus water is run off, but the heat is continued, in order to remove moisture from the moulding boxes, for another fifteen hours. The boxes are then removed from the converter, and the stone within them is practically ready for use. Experiments are now in progress, from which it is hoped that other products of nature's laboratory, such as slate and marble, will presently be successfully imitated.

COOKING BY VAPORISED PARAFFIN.

The gas-cooker is now such a very popular piece of kitcher apparatus that any invention which seeks to displace it must be very good indeed; and it is hard to believe that anything which burns oil can supplant it either in cheapness or efficiency. But this is what the Darby Oil-gas Burner essays to do, and the demonstration given lately in London of its working was certainly satisfactory so far as it went. The oil used is ordinary paraffin; the burner employs no wick, so that there is entire absence of trimming or smoke, and the liquid is vaporised before it. does its work. The main feature of the burner is an asbestos cap, upon which the oil drops from a coiled pipe, the pipe leading from the tank or other receptacle, which may be at some distance from the point of combustion. A few drops of the liquid having fallen, a match is applied, and the coiled pipe is speedily heated, so that the oil is vaporised. The burner will fit into any ordinary cooking - range, and will heat the entire system, oven and all, as efficiently as with a conl fire. The consumption of oil is said to average one gallon in nine hours, which would indicate a cost of about one penny an hour.

USEFUL X-RAYS.

It is very satisfactory and interesting to know that the Röntgen rays, which at first promised to be only a nine days' wonder, are doing such splendid work in the hands of the surgeons. Every big hospital has now its long roll of cases in which the surgeons have been guided in their work by the revelations of the X-ray tube; and now, from the distant Indian frontier, we hear how the wounded are receiving benefit from this method of diagnosis. In one instance a Sepoy had been struck by a bullet, which made a flesh wound across his chest, and apparently had found its exit at his arm. The case was not an extraordinary one, but the surgeons were puzzled by the inflammatory symptoms which manifested themselves, and for which there was no apparent cause. Recourse was had to the Röntgen apparatus, which at once showed that some shadowcasting foreign bodies were lodged in the man's chest. Operation showed that these were pieces of lead, the remains of a bullet which seems to have broken up after impact with the bones.

FIRE INSURANCE BADGES.

An able article in the Daily Mail recently called attention to the leaden medallions or badges of the different fire-offices which may be observed on numerous old houses in London. In past times it was the custom when a householder insured his premises to nail up in a conspicuous place - usually on the brickwork between the first-floor windows - one of these badges, which bore the device of the office from which it emanated. When the insurance ceased by nonpayment of premiums the device was at once removed; but this custom gradually became abandoned, and many of the badges remain to this day. In the old times each fire-office kept its own extinguishing apparatus, but would on no account use it for any houses but those of its own customers, and these badges were the distinguishing marks-many bearing the device of the 'Sun,' others that of the 'Royal' (a crown), and so forth. It is amusing to note that the 'Sun' badge has in certain foreign countries been mistaken occasionally for a religious emblem, and the natives have been seen kneeling before it. The first fire-office in London seems to have been founded during the year which followed the great fire-1667.

PROGRESS IN HORSELESS VEHICLES.

Little more than twelve months ago the restrictions with regard to the use of locomotives on common roads having been modified, the event was signalised by a procession of horseless vehicles from London to Brighton. The exhibition was not an unqualified success, but some of the new-

fangled contrivances did succeed in carrying out the programme arranged. The second of these annual displays has just taken place; and, although, it must be admitted, the distance covered was far less than on the former occasion, the whole affair showed distinct progress. About forty motor-cars took part in the procession, and most of these were driven by oil, one was propelled by steam, and there were a few to represent electricity in rivalry with horseffesh. Among the vehicles was a new one, which has already covered more than two thousand miles on common roads, including a journey from John o' Groat's to Land's End, Cornwall, The proceedings were carried out under the auspices of the Motor-Car Club, who declare, through their president, that the horseless vehicle system is, for journeys under twenty miles, far more expeditious than railway travelling, for the carriage goes from door to door, and there is no waiting at railway stations for dilatory trains. We might mention in connection with this matter that the electrically-propelled cabs, which have now been running in London for some time, are a distinct success. They are so constantly in request that it is quite an exceptional circumstance to see one unoccupied.

AN OLD FAMILY PORTRAIT.

If you could think, if you could speak, I wonder how your voice would sound! And what opinion you would hold Of those who idly crowd around!

Why are your eyes, with passive gaze, Fixed on us as we laugh or weep, As though you seemed to stand aloof And mystic self-communion keep?

Can all we say, and all we do,

And all we are or might have been,
Be nought to you, as though we were

Unknown, uncared for, and unseen?

'Tis ages since the artist's brush Upon a snowy canvas drew Your features; then revered and loved, Now only known by name to few.

It may be ages since you left

To enter on your endless trance;
But day by day we love to build

Around your face some fresh romance.

H. N. M.

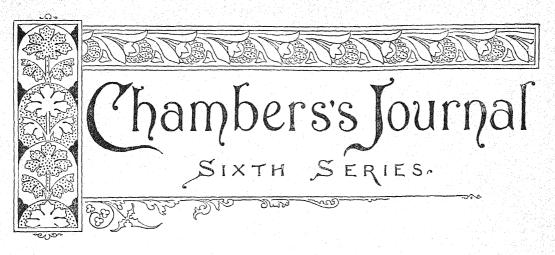
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'LINDA.

A TALE OF THE KLONDYKE GOLDFIELDS.

By W. CARTER PLATTS,

AUTHOR OF 'THE TUTTLEBURY TALES;' 'PHIL'S PARD;' 'ANGLING DONE HERE,' &C.

CHAPTER I .- THE SCHOOL-MARM.



HERE was no prettier building in Oloville than the little log schoolhouse, that in turn, as the summer waxed and waned, was aglow with the blossoms of the fragrant honeysuckle and the clematis, the yellow

rings of the love-vine, and the warm, tender blaze of the woodbine which, outside, clung about the lumber walls and gables, and kissed the topmost shingles of the roof. But the roses and the violets bloomed inside on the cheeks and under the lashes of the school-marm. And there was no prettier woman in all Kausas than little 'Linda—no, nor one-half so pretty, Jim Vickerson vowed to himself a hundred times a day.

It was an afternoon in May—a warm, sunny afternoon. The hum of bees from without and the hum of children from within met on the sill of the open window of the schoolhouse, and mingled and mingled until it seemed to the impatient idler, loafing round the building, that the bees were learning the multiplication table and the children were gathering the honey, for to him all was honey that fell from the lips of the dainty school-marm. A creamy whorl of honeysuckle peeped in at the open window, and Jim Vickerson—'Honest Jim' they called him in Oloville—peeped in at the open door.

Jim was a big, strapping hunk of good nature, that never had done, and never would do, a dirty trick—not even to save his life. Clear six feet he stood in his socks, healthy and handsome, with broad, square shoulders, brawny arms, and a well-cut, bronzed face with short brown beard. And through his fearless, clear blue eyes you could see that he was just as clean within. He

was honest to the core; but he had one fault -he thought everybody else was honest too, and that was what was the matter with Jim. His heart was too big. 'Linda said it was, and 'Linda ought to know, for she had had it in her keeping ever since she came to teach school in Oloville in the fall of '93. This failing had stood seriously in the way of Jim's prosperity. He had tried his hand at raising wheat, at growing sorghum cane, at breeding stock, and always with the same result-Jim did all the work, and, somehow, somebody else invariably scooped in all the profits. And now the resources of Oloville were exhausted, and the modest little pile of dollars his father had left him, and which he had striven so zealously to increase, had dwindled pitifully.

The hum within the log building ceased. School was out, and little Sukey Sanders gathered up her own and her brother Johnnie's spellingbooks into the school-bag, and shouldered it; and picked up the dinner-basket with the empty piedish in, to carry home. For Sukey loved her big, handsome brother so that it was a pleasure to her to be his slave and carry his things; and Johnnie wasn't mean enough to deprive her of a trifling treat like that. As the handful of scholars tumbled noisily out of the schoolhouse Jim crept in. 'Linda was just shutting up the children's copybooks in her desk. With her big white pinafore that she always were in school, and her soft, curly locks that had burst restraint and shaken themselves down in a dusky shower upon her shoulders, she looked like a child herself-a roguish, impulsive, heart-captivating child. Dropping the desk-lid, she sprang lightly upon a low bench, made Jim a mock curtsy, and,

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clasping her hands behind her, began to recite in a sing-song voice:

'Linda had a great big bear— They called it Jim, you know; And everywhere that Linda went That bear was sure to go.

'It followed her to school one day,

'Guess I feel pesky like one jest now, anyhow,' Jim interrupted gravely.

'Like a what?' asked 'Linda sharply, with a startled look. All sign of the roguish child vanished from her as she stepped down from the bench, and it was a woman that stood before him—a timid, shrinking woman, crouching under the blow that, somehow, she instinctively knew was about to fall on her.

'Like a b'ar,' he went on slowly, ''cos I'm afeared I'm a-going to hurt you with what I've got to tell you.'

It was so hard to get the words out that the perspiration stood upon his forchead, and he sat down on the form and mopped his face with his handkerchief.

'Pore 'Linda—pore little 'Linda,' he continued with an effort, taking one of her hands in his, and stroking it tenderly, if clumsily, as though to soften the shock. 'I guess your b'ar won't follow you to school no more fur a spell.'

Linda gave him one quick, frightened glance.

'There's there's nothing come betwixt you and me, Jim?' slie queried tremulously.

And Jim only looked back into her eyes with a grave, confident smile that reassured her more than words could have done.

"Then I don't fear anything in the whole wide world! And now, Jim, I'm ready for all the hard things you've got to tell me,' she rattled on recklessly.

'Linda,' he said gravely, 'I'm afeerd I've jest got to quit Oloville and—and you fur a spell.'

'Linda's face blanched in spite of her recent boast.

'On'y fur a spell,' he went on quickly, in order to reassure her, 'mebbe fur a couple o' years; and then, of co'se, please God, I'll come back and—and my little 'Linda shan't hev to teach spellin'-school.'

'Must you go-must you leave me?'

'Yas. It's powerful hard, 'Linda—powerful hard; but, you know, I've tried here to git a home fit fur the purtiest gal in all Kansas, and—and— Wall,' he went on solemnly, 'I'm strong, and Lord knows I'm willin', and I ain't going to hev it said of me, "He set right here in Oloville fur thirty years, and—busted!"

'Jim,' she whispered, almost timidly, 'if only my salary were a little bigger, we might perhaps be able—with what you have—to manage without you going away until something turned up.'

Unselfish little 'Linda! Like wee, little Sukey

Sanders, she loved her big, handsome boy so much that she would gladly have borne all his burdens for him, if she could, and have been proud to do it.

'No, 'Linda,' Jim returned; 'I couldn't do it. I'd feel I was far too mean a skunk fur my own comp'ny, ef I was jest loafing around while my wife earned the bread to put into my mouth. I reckon there's two things lef open to me—cow-punching in 'Texas or Arizony, which ain't an occupation calkerlated to providing a home fur the sweetest flower of Kansas, onless, of co'se, you run a ranche on yer own account, and I ain't enough business in me to keep a cat outer a pasture lot, not to mention running a ranche.'

'No, Jim, I wouldn't like you to try that.'

'Wall, then,' he went on hurriedly—after the manner of a man with a pill, who, after shirking the task of taking it as long as possible, and having at last got it between his teeth, is only anxious now to bolt it whole and get the job over as speedily as possible—'the point's right here: I've read in the Topeka Straight Talk there's an Alaska trading steamer fitting out at Seattle fur Juneau to unload parties fur the new goldfields on the Yukon; an' I reckon, 'Linda, my chance is jest awaiting fur me to take holt of it, fur there's gold there fur any feller who ain't afeered of hunching hisself and going into some real hard work baldheaded.'

'And when must you go, Jim, if you go?'

'To-night. I kin git on the cars as the express comes through at two in the morning.'

'To-night!—so soon?' 'Linda gasped faintly.

'Yes. There ain't any time to be lost of I git by this trip, and a powerful deal depends on gitting there airly on in the season.'

'And if you were lucky, and did find plenty of gold, perhaps you'd get robbed?' urged 'Linda timorously.

For answer Jim drew himself up to his full height, and glauced down at his own athletic figure confidently.

'No, no; I didn't mean that way,' she went on hastily. 'I mean that—that—I mean—you know, Jim, you're too kind-hearted—you're too good, and there's such a lot of plausible, smooth-tongued'—

'Yas, I reckon I git yo'r meaning, 'Linda,' he said, with a quiet smile of self-confidence; 'but, s'pose I did strike it rich, I'd jest say—ef any temptation come anigh me to hand over any of my pile into another feller's keeping—I'd jest say, "No, Jim Vickerson, 'twouldn't be honest—'twould be downright thieving. Thet gold ain't yo'rn—you ain't no property in it. It jest belongs right away to little 'Linda—ev'ry cent of it—and you ain't any excuse to start fooling with anybody's dollars that don't belong to you."

Then 'Linda's spirit awoke, and lashed her breast inwardly with her conscience. Springing back-

'LINDA.

ward, with the tears flashing in her eyes, she stamped her little foot determinedly and cried:

'I'm a mean, selfish wretch to try to spoil all your plans—to thwart all your ambitions, just because I want to see you every day. Go, Jim—go! And God be good to you and bring you back to me again! Go—go—go! Go, before my love overpowers my reason, and I bid you never—never leave me. Go—but stop! Give me one kiss. Now go, brave heart!' And, flushed and trembling with emotion, she sank helplessly upon a seat, as Jim, with wavering step and many a backward glance, left the schoolhouse.

In the dark hours of the early morning one solitary light burned in the gable-window of Eben Hutchin's frame-house, where the school-marm boarded. And, as Jim Vickerson strode past the building on his way to the depôt, a graceful, muffled figure stole out from Eben Hutchin's porch and slid five soft white fingers into the man's rough palm. And so, silently, the two passed on together to the depôt. And soon the Western express dashed alongside the platform. The conductor sang out 'All aboard!' the engineer rang his bell; the cars swung out into the darkness. All that could be seen of them was the red taillight, growing less, and less, and less in the pitchy blackness of the night; and little 'Linda's figure was left alone upon the deserted platform. But 'Linda's heart had gone out in the ears over the rolling prairie.

William J. Klippins had a pretty big store on Maine Street, Seattle, and a distant cousin at Oloville. William J. had prospered exceedingly in the things of this world; and, as for the next, he was a deacon at the neighbouring Methodist Church. Consequently, the distant cousin at Oloville had not failed to sound the praises of his wellto-do relative at Seattle-and had sounded them, too, with the loud pedal on, so to speak. It was not surprising, then, that, after Jim Vickerson had secured his berth on board the Flaming Occident, he should inquire the locality of Klippins's store, and proceed thither for the purpose of procuring his outfit. As he entered, the deacon was haggling with a customer over the price of some steel pickaxe points, or, rather, the customer was doing the haggling, while the other beamed upon him with a benevolent smile that would have melted all but the hardest-hearted wretch into the soothing belief that he, William J., in allowing him to purchase the tools at all, was laying him under a debt of gratitude that mere, cold, unsympathetic dollars could never possibly repay.

The customer, however, must have had a heart of stone, for he was armour-proof against all the deacon's blandishments. Deliberately taking off his big slouch hat, he swept it slowly round, and remarked sarcastically:

'It 'pears to me, Cap., you air a leetle slow at gitting my drift. It's steel p'ints I'm after—

not the flotation price of your hull durned store?

He was a striking, if uninviting, personage, this obdurate customer. His bald head shone like the summer sea between two ragged, knobby islands of grisly hair, under the lee of which sheltered one whole ear and the remnant-about half-of another. Beneath one shaggy brow peered out a piercing, shifting, restless eye, slightly bloodshot from a long and familiar acquaintance with cheap 'pisen' - forty-rod' whisky - which had not yet completely conquered the iron constitution of the man; while under the other eyebrow the orbless eye-socket, left vacant by the accomplished fingers of a Mexican 'gouger' in a 'Frisco gambling-saloon, meandered off into a long, deep sear, dividing the cheek-bone from the temple, so that it was difficult to say where the scar ended and the eye-socket began. His cheeks and chin were covered with long, light-gray, tangled whiskers, while his upper lip bore a white, bristly moustache, the growth of one-half of which the eccentric healing of a deep cut had turned in an upward direction, which, together with the empty, elongated eye-socket, lent a terrifying, lopsided fierceness to his face that made women shudder to look at him, and frightened children. For the rest, he was of medium height, with broad, somewhat rounded shoulders, and a supreme indifference to such mere trifles as religion and morality. His father being one of the now historic 'forty-niners,' he had been taken out West at a tender age, and had had the first elements of profanity and nineteenth-century heathenism instilled into him in a Californian gulch. Since then he had himself assisted to rush the Cariboo goldfield, had worked in the mines and smelted ore in Nevada, worked up and down the coast in a trading schooner-in short, had tried his hand at a score of rough-and-tumble trades, and, lastly, had quitted rounding up beef in Colorado, attracted, like 'Honest Jim,' to the gold-strewn basin of the

'I re-gret I can't take a single cent less for the points,' replied Klippins blandly, smiling the sweet smile of a universal benefactor. 'What I ask you is pre-cisely one cent each more than I gave for them, and out of that cent I have to pro-vide for the freight and rent of '——

'Cheese it, Cap.—cheese it.'

'Pre-cisely'

What the deacon was about to add did not transpire, for at that moment his eye lighted upon Jim as the latter entered the store, and his quick business instinct at once scented a tractable customer. Leaving the old adventurer to be attended to by a clerk, he turned to the new-comer. In a few brief words Jim explained that he was starting for the Yukon goldfields, and required an outfit; and in a few brief minutes he was selecting—or, rather, he thought he was selecting, but, in reality, the seductive storekeeper was insidiously selecting for him, as the conjurer forces

upon the unwitting spectator the cards he wishes—a miscellaneous assortment of unnecessaries that he would have only been too glad to throw away before he reached his goal.

The adventurer—'Twilight Ben' was his latest sobriquet, bestowed upon him on account of the semi-darkness of his vision—pricked his ear and a-half, and took a critical glance at Jim.

'Humph!' was his mental conclusion, 'young Eastern jay gitting plucked ready fur roasting. Blamed ef he'll hev a durned feather left ef I don't jest chip in an' stop the circus! The innercent's ez powerful ez a Arizony mule without the kick, an'Il turn out mighty hefty at digging dirt. Gosh! but I've struck a streak this trip! I reckon he's jest the galoot I'm wanting. This yer is a purty business, and I'm on it. Labour on the Yukon, they dew say, ain't to be had. This yer innercent and me is going to be pards-work and share alike; and ef we should strike it rich, and of the young jay should git accidentally laid out with lead-pisening through prospecting up the bar'l of a derringer, or the sides of the flume caving in, wall, of co'se, I'm his pard, and I jest take keer of his pile fur him-skursely!'

Then he quietly strode over to Jim, touched him on the arm and inquired:

'Say, stranger, it ain't no funeral of mine, but air you going to run a church-fair with these yer flim-flams? 'Cos thar ain't no call fur sech on the Yukon. I ain't been through the Cariboo rush and the San Jonquil boom without knowing what's trumps, you bet; and it gravels me to see a young innercent bluffed.'

Jim turned quickly round to Twilight Ben and gave him a searching look. In an instant his lack of business instinct and his inexperience protruded themselves painfully before him. Here was luck indeed—here was the experienced, guiding hand that he lacked. Providence had been kind to him.

'Ef you would jest help me select things I'd take it real kind of you,' he returned gratefully.

The deacon frowned and expostulated, so that Jim felt as if he were performing a contemptibly mean action in not purchasing a lot of useless rubbish; but the thought of 'Linda held him fast, and he steadfastly insisted upon relying upon the judgment of the stranger who had come to his aid in time of need. As for Twilight Ben, he accepted his new position of adviser with cheerful serenity.

'You air a tenderfoot,' he observed confidentially to Jim. 'I calkerlate your best lay is jest to freeze to me till yer hoofs git toughened, and I'll run this yer circus fur yer.—Now, Cap.,' turning to Klippins, 'I'm stakin' out this yer innercent's claim fur him, so I reckon you'd better jest stow that chin-music o' yourn, and trot out some gumboots an' strong woollen jumpers!'

In the end, much to the storekeeper's chagrin, Jim was provided with a really serviceable outfit at a reasonable price, and as he left the store in company with the grisly old digger, the deacon followed him sorrowfully with his eyes, and sighed sadly to himself:

'Î fear the Lord has delivered that worthy young man into the hand of the Philistine.'

HOW OUR SHORES ARE PROTECTED.

A WONDERFUL SYSTEM OF LINKED DEFENCE.



HE safety of our homes in time of war depends upon the defences of the rockbound coasts of the United Kingdom. Though it is a question of concern to every man, ten years ago we slept quite peacefully in

our beds when our shores were without any adequate defence, and the navy was so weak as to be quite unable to cope with any alliance of powers if they had desired to land troops on our coasts or had determined to shell such seaside towns as Grimsby, Portland, Falmouth, or Liverpool. It is impossible to foresee what dire calamity might not have happened, for our weakness against attack by sea was not a matter of opinion, but a great pregnant fact which all statesmen admitted as soon as their attention was drawn to the matter. During the intervening ten years the work of preparing for any possible foe has been pushed forward, and very soon we shall be able

to boast a system of defence as perfect as human ingenuity can make it.

A royal commission has been at work planning a complete system of coast communication, and unlike most royal commissions it has done a great deal. It has girdled these islands round with the electric wire, with branch-wires shooting off to out-of-the-way coastguard stations; so that wherever an enemy may appear news of his approach will be telegraphed in the twinkling of an eye to the naval authorities in London. Under these circumstances any enemy would have to be very wide-awake to elude the marine telescopes that from each of the several hundred coastguard stations are daily directed over the sea watching every passing ship. Once these many telescopes had little significance; now, thanks to the telegraph or telephone wires that bring these distant stations within speaking distance of Whitehall, they are the many eyes of the ubiquitous 'Commissioners for Executing the Office of Lord High Admiral, always peering out seawards on the chance of seeing any ship intent on doing mischief. These coastguard stations are no longer isolated spots unconnected with the world and unsupported by soldiers or sailors, but belong to one great intercommunicating system. Every coastguardsman may cherish the feeling that behind him is all the might of England—a navy of 100,000 men and 450 warships, a home army of 150,000 regulars, besides 415,000 officers and men of the militia, yeomanry, and volunteers—on which the British taxpayers are spending over forty-four million pounds every year.

This is a great change compared with ten years ago, when there was no electric wire to carry the faintest warning of danger from John o' Groat's to London or the Land's End, when the navy was

weak, and the army badly organised.

In these ten years Great Britain has awakened to a realisation of her defenceless position, and the sight of the mother-country buckling on her armour has stirred the enthusiasm of the colonies and far-off dependencies, and there is now no whisper from Canada, Australia, or South Africa of a claim for independence; because every colonist is proud to belong to an empire so strong and so well protected.

But more than this has been accomplished. At Sheerness, Portsmouth, Portland, Southampton, and Plymouth—the ports nearest to the French coast -large sums have been spent in recent years in mounting the most modern guns to command the entrances to these harbours and sweep the seas for many miles. Where these far-reaching guns have been mounted there are searchlights, so that in the darkest night the gunners will be able to watch every object that moves on the water, and check with a hailstorm of shells any marauding boat of an enemy. Recent experiments have shown, however, that these searchlights are not so efficient as the authorities once believed. It has been proved that an enemy's torpedo-boat destroyer could creep quickly past these penetrating beams into the arsenals and ports they are intended to protect. Of course this defect will have to be remedied, so that these ports may be rendered impregnable by night as well as by day.

Other important links in this chain of defences are the booms that have just been constructed to protect the entrances to the great harbours that would be the targets of a foe. As far back as the reign of the Edwards, ports that were then regarded as vulnerable were protected by a great iron chain drawn across the entrances to the harbours at night, being suspended from fortified towers on either bank. Many of these towers remain to this day as picturesque ruins. The people of Fowey, the little town on the Cornish coast that the novelist 'Q.' has made famous, have preserved some links of the old boom-chain that

was once suspended from two toy-like forts built at the entrance to the harbour, one on each side, where soldiers were on the alert to raise the alarm in case of an attack.

This old method of defence is now being revived; but the booms are not merely chains, which any modern ship could break, but elaborately constructed obstacles that render the harbours practically impregnable. They have already been made for Sheerness, Portsmouth, Southampton, Portland, and Plymouth, and others are to be constructed for the old postal-packet port of Falmouth, and for Berehaven and Lough Swilly-the harbours that are considered by the defence authorities most open to attack. The character of these boomdefences differs. In some instances each boom consists of a net of interwoven cables, supported at the rear by gunboats manned and ready for action. At other ports the boom consists of a series of pontoons, made of hard and heavy timber bound together with strong wire cables, and on the sea-side offering an enemy's ship a number of ugly steel spikes, like the bayonets of an army of soldiers, if it persists in seeking to force an entrance; and behind these portoons will be a number of specially-fitted gunboats holding them in position and capable of teaching an enemy many lessons, which the guns of the neighbouring forts would assist in driving home.

Add to this chain of defences the many ships of the 'A' division of the Fleet Reserve at Sheerness, Portsmouth, and Devonport, ready at forty hours' notice to put to sea and teach a foe the good manners of staying at home until he receives an invitation to our shores. Lastly, there are the powerful ships that are stationed round our coasts -her Majesty's ships Galatea at Hull, Mersey at Harwich, Australia at Southampton, Alexandra at Portland, Colossus at Holyhead, Rodney at Queensferry, Benbow at Greenock, Collingwood at Bantry, and Melampus at Kingstown. Besides these warships there are many smaller cruisers, satellites of the coastguard ships, and there are what are known as coastguard watch vessels at Walton Creek, Yantlett Creek, Stangate, East Swale, Cliffe Creek, and Roach River. All these vessels, and many others dotted up and down our coasts, serve as eyes to the Lords of the Admiralty at Whitehall.

It can no longer be said that Great Britain is unprotected. The coast defences were never more complete or efficient. Right round our shores stretch these many defences, not isolated and therefore of little account, but forming a linked protection, with the telegraph or telephone at hand to respond at the naval headquarters in London to the slightest warning; and from Whitehall there branch off private wires to the great arsenals of Portsmouth, Devonport, Chatham, and Sheerness. A few words from any point on the coast, be it an isolated coastguard station or a lonely guardship, may in an hour or two have led

to orders of national import being flashed over sleeping towns and villages to the naval commanders-in-chief at the coast, and before the outside world knows of impending danger all the machinery of defence will be in readiness for any emergency. That this is no exaggeration those may judge who remember the hasty commissioning of the Particular Service Squadron in January 1896, when the German emperor's ill-judged telegram to President Kruger set England ablaze with anger. Before even the *Times* announced the decision of the government to form this new

squadron, 'to do anything and go anywhere,' as Mr Goschen explained, the telegraph instruments at Whitchall had been vigorously ticking, and unknown to the public the admirals at Chatham, Portsmouth, and Devonport had had their orders. By the time the world was awake the preparations for commissioning the ships had commenced, and in a few days a squadron of powerful modern vessels was fitted out and ready for any task. When the necessity arises no less promptly will the machinery of defence be again put to the test, possibly on a more extensive scale.

JOHN BURNET OF BARNS.

By JOHN BUCHAN.

CHAPTER XI.-I VISIT MASTER PETER WISHART.



HE life at the College of Leyden was the most curious that one could well conceive; yet ere I had been there a week I had begun heartily to like it. The students were drawn from the four corners of Europe—Swedes.

great men with shaggy beards and invincible courage; neat-coated Germans; Dutchmen by the score; and not a few Frenchmen, who were the dandies of the place. We all gathered of a morning in the dusky lecture-hall, where hung the portraits of the great scholars of the past, and where in the cobwebbed rafters there abode such a weight of dust that a breeze coming through the high windows would stir it and make the place all but dark. Nor had I fault to find with the worthy professors, for I found soon that Master Sandvoort, though a miserly churl, had vast store of Latin, and would expound the works of Cornelius Tacitus in a fashion which I could not sufficiently admire. His colleague, too, who was the best of good fellows in the seclusion of his house, in his lecture-room was dignified and severe in deportment. You never saw such a change in a man. I went on the first morning expecting to find little but buffoonery; and lo! to my surprise, in walks my gentleman in a stately gown holding his head like an archduke's; and when he began to speak it was with the gravest accents of precision. And I roundly affirm that no man ever made more good matter come out of Plato. In truth, I got a great wealth of good scholarship and sound philosophy from my squire of bottle and pasty.

I was not the only Scot in Leyden, as I soon discovered; for forbye that I had letters to Master Peter Wishart, who taught philosophy in the college, there abode in the town Sir James Dalrymple, afterwards my Lord Stair, the great lawyer, and sometime a professor in my old college, whose nephew I had so cruelly beaten

before I bade farewell to Glasgow. He was a man of a grave deportment, somewhat bent with study, and with the look of exceeding weight on his face, which comes to one who has shared the counsel of princes.

As I have said, forbye attending the two classes of Greek and Latin, I resorted to the lectures of Master Wishart, who hailed from Fife. He was well acquainted with my family, so what does he do but bid me to his house at Alphen one Saturday, in the front of March. For he did not abide in Leyden, never having loved the ways of a town, but in the little village of Alphen, some seven miles to the north-east.

I accepted his bidding, for I had come therefor no other cause than to meet and converse with men of learning and wisdom, so I bade Nicol have ready the two horses which I had bought at eleven o'clock in the forenoon.

It was a clear mild day when we set out, with no trace of frost and but little cold. The roads were dry underfoot, and the horses stepped merrily, for they were fresh from long living indoors. The fields on either side were still bleak; but the sowers were abroad, scattering the seeds of the future harvest. The waters that we passed were alive with wildfowl, who had wintered in the sea-marshes and were now coming up to breed among the flags and rushes of the inland lakes. The tender green was sprouting on the trees, the early lark sang above the furrows, and the whole earth was full of the earnest of spring.

Alphen is a straggling line of houses by a canal. They are all well-sized and even with some pretension to gentility, with long gardens sloping to the water, and shady coverts of trees. Master Wishart's stood in the extreme end, apart from the rest, low-built, with a doorway with stuccoed pilasters. It was a place very pleasant to look upon, and save for its flatness I could have found it in my heart to choose it for a

habitation. Master Wishart dwelt here since he had ever a passion for the growing of rare flowers, and could indulge it better here than in the town of Leyden. He was used to drive in every second day in his great coach, for he lectured but three times a week.

In a handsome arbour, at the side of which flowered the winter-jasmine, and around the door of which—so mild was the day—some half-dozen men were sitting.

I found my host, Master Wishart, a short, spare man, with a long face adorned with a well-trimmed beard. His eyes twinkled merrily when he spoke; and but for his great forehead no one might have guessed that he stood in the presence of one of the most noted of our schoolmen.

He rose and greeted me heartily, bidding me all welcome to Alphen, saying that he loved to see the sight of a Scots face, for was he not an exile here like the Jews by the waters of Babylon? 'This is Master John Burnet of Barns,' said he, presenting me to a very grave and comely man some ten years my senior, 'who has come all the way from Tweedside to drink at our Pierian spring.' The other greeted me, looked kindly at me for a second, and then asked me some question of my family; and finding that a second cousin of his own on his mother's side had once married one of our race, immediately became very gracious and condescended to tell me his opinions of the land, which were none so good. He was, as I did not know till later, Sir William Crichtoun of Bourhope, that Sir William who in after times was slain in the rout at Cromdale when the forces of Buchan and Cannon were caught unawares on the hill-

I had leisure now to look around me at the others, and a motley group they were. There was Quentin Markelboch, the famous physician of Leyden, who had been pointed out to me in the street some days before, a little round-bellied man with an eve of wondrous shrewdness. There was likewise Master Jardinius, who had lectured on philosophy at one time in the college, but had now grown too old for aught save sitting in the sun and drinking Schiedam-which, as some said, was no great pity. But the one I most marked was a little, fiery-eyed nervous man, Pieter van Mieris by name, own cousin to the painter, and one who lived for nothing else than to fight abstruse metaphysical quarrels in defence of religion, which he believed to be in great peril from men of learning, and but for his exertions on its behalf to be unable to exist. It was he who first addressed me.

'I have heard that the true religion is wondrous pure in your land, Master Burnet, and that men yet worship God in simple fashion and believe in Him without subtleties. Is that so, may I beg of you to tell me?'

'Ay,' I answered. 'We folk in Scotland keep

to our own ways, and like little to import aught foreign, be it heresy or strong ale.'

'Then,' said my inquisitor triumphantly, 'you are not yet tainted with that most vile and pernicious heresy of all, with which one Baruch Spinoza, of accursed memory, has tainted this land?'

I had no time to answer, for just at this moment all thoughts of philosophy and philosophers were banished from my mind by the sudden arrival of a new guest, no other than the worthy professor of Greek, Master Quellinus.

He greeted the rest with great joviality. 'A good day to you, my masters,' he cried, 'and God send you the ease which you love. Here have I been bearing the heat and burden of the day, all in order that lazy folk should have carp to eat when they wish it. Gad, I am tired and wet and dirty, this last beyond expression. For heaven's sake, Master Wishart, take me where I may clean myself.'

The host led the fisherman away, and soon he returned, spruce and smiling once more. He sat down heavily on a seat beside me. 'Now, Master Burnet,' says he, 'you must not think it unworthy of a learned Grecian to follow the sport of the angle, for did not the most famous of their writers praise it, not to speak of the example of the Apostles?'

I tried hard to think if this were true.

'Homer, at any rate,' I urged, 'had no great opinion of fish and their catchers; though that was the worse for Homer, for I am an angler myself and can understand your likings.'

'Then I will have your hand on it,' said he, 'and may Homer go to the devil. But Theocritus and Oppian, ay even Plato, mention it without disrespect, and does not Horace himself say "Piscemur"? Surely we have authority.'

But this was all the taste I had of my preceptor's conversation, for he had been walking all day in miry ways, and his limbs were tired; nor was I surprised to see his head soon sink forward on his breast, and in a trice he was sleeping the sleep of the just and labouring man.

And now we were joined by a new-comer, no less than Mistress Kate Wishart, as pretty a lass as you will see in a day's journey. She had been nurtured by her father amid an aroma of learning; and truly, for a maid, she was wondrous learned, and would dispute and cite instances with a fine grace and a skill which astonished all. Her father brought me to her and presented me, which she acknowledged with a courtesy which became her mightily; but I spoke not two words to her, for the old man led me away down one of the alleys among the trees.

'Kate'll look after thae auld dotterels,' saidhe, speaking in the broadest Scots. 'I brocht herout that I micht get a word wi' ye my lane, for I'm fair deein' for news frae the auld country. First of a', how is Saunders Blackett at Peebles? Him and me were aince weel acquant.' And when I had told him he ran off into a string of inquiries about many folk whom I knew and whom he once had known, which I answered according to my ability.

'And now,' he says, 'I've bidden twa-three o' the officers o' the Scots brigade to supper the nicht, so ye'll see some guid Scots physiogs after thae fosy Dutchmen. Ye'll maybe ken some o'

them.'

I thanked him for his consideration; and after I had answered his many questions we returned to the others, whom I found busily arguing some point in divinity, with Mistress Kate, very disgusted, in their midst.

CHAPTER XII.-THE STORY OF A SUPPER-PARTY.



Y first thought on entering the supperroom was one of amazement. The owner of the house, whom I had taken to be a man of simple tastes, here proved

himself to be a very caliph for magnificence. Many choice paintings looked down at us from the sides, richly framed and fitting into recesses in the panelled walls. The floor was laid with bright-dyed rugs and carpets of Venetian stuff, and the chairs and couches were of finely-carved wood. The whole was lit with a long line of waxen candles in silver sconces, which disputed the sovereignty with the departing daylight. But the choicest sight was the table which was laden—nay, heaped—with rich dishes and rare meats; while in the glass and metal flagons the wine danced and flamed.

Those who had not been present in the garden were gathered at the lower end of the room, whither the master of the place betook himself to greet them. There were also some of the officers in the Scots regiment, at least of that portion of it which was then lying at Leyden. Their dress was sober compared with the richness of such soldiery as I had seen in my own land, but against the attire of the citizens it was gaudiness itself.

I found myself sitting close to the head of the table on the right hand of my host, betwixt a portly Doctor of Laws and my worthy Master Quellinus. This latter was now all but recovered from his fatigue, having slept soundly in the arbour. He was in a high good-humour at the sight of the many varied dishes before him, and cried out their merits to me in a loud, excited tone which made my cheeks burn.

I paid little heed, however, to Master Quellinus's conversation, or to that of my left-hand neighbour, whose mouth was too full for words. But I found great entertainment in watching the faces and listening to the speech of some of the other guests. The table was wide and the light dim, so that I had much ado to make out clearly those opposite me. I marked Mistress Kate, very daintily dressed, talking gaily to some one at her side.

'Well, to tell you the truth, my dear Mistress Kate, this land of yours is not very much to my liking. To be sure, a soldier is contented wherever his duty calls him; but there is no fighting to be done, and the sport is not what I have found elsewhere. I am in such a strict place that-Gad-I cannot have a game with a fat citizen without having to listen to a rigmarole of halfan-hour's duration on the next morning. is so much psalm-singing in the place that an honest gentleman can scarcely raise a merry song without having his voice stopped by half-a-dozen sour-faced knaves. 'Faith, I wish I were back in my own land, where there is some work for a cavalier. There is but one thing that I should except,' and he bowed low to his neighbour, 'the women, who are as beautiful as the menfolk are hideous. Though in truth I believe that the most levely of them all is a countrywoman of my own;' and again he made her a fine bow.

The voice and the tone were strangely familiar, but for the life of me I could not give them a name. I could only note that the man was a big, squarely-made fellow, and that he seemed to be in a mind to make love to his host's daughter. She made some blushing reply to his compliments, and then, as luck would have it, a servant set a light between us, and the faces of both were revealed clearly to me.

I sat bolt upright in my chair with sheer astonishment, for there, dressed in the habiliments of the Scots regiment, and bearing himself with all his old braggadocio, sat my cousin Gilbert.

Then I remembered how I had heard that he had gone abroad to some foreign service, partly to escape the consequences of some scrapes into which he had fallen, partly to get rid of his many debts. And here he was, coming to the one place in Europe to which I had chosen to go, and meeting me at the one table which I had chosen to frequent. In that moment I felt as if the man before me were bound up in some sinister way with my own life.

Almost at the same instant he turned his eyes upon me, and we stared in each other's face. I saw him start, bend his head towards his companion, and ask some question. I judged it to be some query about my name and doings, for the next moment he looked over to me and accosted me with a great semblance of hilarity.

'What,' he cries, 'do I see my cousin John? I had not dared to hope for such a welcome meeting. How came you here?' And he asked me a

string of questions.

I answered shortly and with no-great cordiality, for I still remembered the doings in Tweeddale, and my heart was still sore in the matter of my father's death. Forbye this, Gilbert spoke with

not a little covert scorn in his tone, which I, who knew his ways well, was not slow to detect. It nettled me to think that I was once more to be made to endure the pleasantries of my cousin.

'And how goes all in Tweeddale, my dear cousin?' said he. 'I condole with you on your father's death. Ah! he was a good man indeed, and there are few like him nowadays. And how does Tam Todd, my friend, who has such a thick skull and merciless arm? And oh, I forgot! Pray forgive my neglect. How is fair Mistress Marjory, the coy maid who would have none of my courtesies?'

The amazing impudence of the fellow staggered me. It almost passed belief that he should speak thus of my father, whose death had lain so heavily at his door. This I might have pardoned; but that at a public table he should talk thus of my love irritated me beyond measure. I acted as I do always when thus angered—I gave him a short answer and fell into a state of moody disquietude.

Meanwhile my cousin, with all the gallantry in the world, kept whispering his flatteries into the

pretty ears of Mistress Kate.

As I sat and watched these twain I had no eyes for any other. The very sight of Gilbert brought back to me all my boyhood in Tweedside, and a crowd of memories came surging in upon me. I fancied, too, that there was something of Marjory in the little graceful head at my cousin's elbow, and the musical, quick speech. I felt wretchedly jealous of him, God knows why; for the sight of him revived any old fragments which had long lain lurking in the corners of my mind; and as he chatted gaily to the girl at his side, I had mind of that evening at Barns when I, just returned from Glasgow College, first felt the joy of possession. I sat and moodily sipped my wine. Why had I ever left my own land, and suffered my lady to be exposed to manifold perils? For with the first dawnings of jealousy and anger came a gnawing anxiety. I had never felt such a sickness for home before, and I cursed the man who had come to ruin my peace of mind. Yet my feeling toward my cousin was not that of hatred; indeed, I could not refrain from a certain pity for the man, for I discerned in him much noble quality; and was he not of our own blood?

'Come now,' I heard Mistress Kate simper, 'I do not believe that tale of any one, and above all of him, for a soberer does not live. Fie, fie, Master Gilbert, I took you for a more generous man!'

'On my faith, my dear, it is true,' replied my cousin. 'For all his docile looks he is as fond of a game as the rest of us.'

Now I guessed that my cousin had been traducing me to the fair Kate, and I grew not a little hot. But his next word changed my heat into fierce anger; for my cousin continued:

'What saith the Latin poet?'—and he quoted a

couplet from Martial—a jest at the usual amusements of the seemingly-decent man.

I know not where he had got hold of it, for he was no scholar; but it was full of the exceeding grossness which is scarcely to be found outside that poet. He thought, I could guess, that the girl understood no Latin; but, as I knew, she had a special proficiency in that tongue. She understood the jest only too well. A deep blush grew over her face from her delicate throat to the very borders of her hair. 'Twas just in such a way that Marjory had looked when I first told her my love. Twas in such a fashion she had bade me farewell. The thought of her raised a great storm of passion in my heart against any one who would dare thus to put a woman to shame. I strove hard to curb it, but I felt with each second that it would overmaster me.

'Well, John, what think you of my Latinity?' asked my cousin from over the table.

'I think—I think,' I cried, 'that you are a mean, scurrilous fellow, a paillard, a hound. 'Fore God, Gilbert, I will make you smart for this;' and ere I well knew what I did I had seized my glass and hurled it at his head.

It struck him on the cheek, scratching the skin, but doing little hurt.

In a trice he was on his feet, with his hand at his sword. One-half the table rose and stared at the two of us, while Master Wishart left the head and came rushing to the back of my chair. As for myself, I felt such desperate shame at my conduct that I knew not what to do. I had now made a fool of myself in downright earnest. I felt my cheek tingling and flaming; but I could do nought but look before me.

Then my cousin did a thing which gave him great honour and completed my shame; for, bridling his anger, as I saw, with a mighty effort, he said calmly, though his arms were quivering with excitement:

'I would ask you to be more careful in your use of glasses. See, yours has flown right over to me and played havoe with my cheek. Faith, it is no light duty to sup opposite you, mon ami. But indeed, gentlemen'—and he bowed to the company—''twas but an unfortunate mischance.'

At this all sat down again, and scarce five minutes after Gilbert rose to leave, and with him the other gentlemen of his regiment. Master Wishart bade him sit down again, for the night was yet young, but my cousin would not be persuaded. He nodded carelessly to me, kissed his hand to pretty Mistress Kate, and swaggered out.

I sat dazed and meditative. I was raw to many things, but I knew well that Gilbert was not the man to sit down under such an affront. He had shielded me for his own reasons, of which I guessed that family pride was not the least; but he would seek a meeting with all despatch. And in truth I was not averse to it, for I had many accounts to settle with my dear cousin. I fell to

thinking about the details of the matter. In all likelihood he would come on the Monday, for the Sabbath was a day of too strict propriety in this land, as in my own, to allow of the settling of any such business. Well, come when he might, I should be ready; and I rose from the table, for the sooner I was back in Leyden the better.

I took farewell of my host, and he could not refrain from whispering in my ear at parting, 'Jock, Jock, my man, you've made a bonny mess o't. Ye'll ha'e to feeht for it, and see ye dae't weel.'

Nicol was waiting at the gate with the horses, and together we turned on our homeward way.

A TRANSVAAL LOTOSLAND.



N the extreme north-easterly corner of the Transvaal lies one of the least-known portions of South Africa—a spot so unlike the rest of the Republic that the few travellers who strike it invari-

ably grow enthusiastic over its charms. Nature has done its best to preserve intact from the invasion of the white man the solitudes of this verdant district. It is difficult of access, the roads being mere ox-tracks that the first rain of summer effaces altogether or ploughs into the bed of a torrent. Deadly malaria lurks in the valleys and along the banks of the Limpopo, that forms its northern boundary; the tsetsefly kills off the horses of the traveller, whom the natives are not eager to befriend or assistfor the late chief, Magato, inoculated his subjects with a virus of suspicion which renders them proof against the overtures of the concessionhunting gold-prospector, in whom they see only a dangerous and subtle enemy of the country.

Although under the protection of the Transvaal government, the natives of this district are practically as independent as in the days before the voortrekker had been seen. They have never been conquered by the Boers, and the independence of the nation has been solidified by the late chief, Magato, as diplomatic and able a monarch as ever occupied a king's kraal. It has passed into history how he defied the Boer commandant, the redoubtable General Joubert, when he was sent to collect arrears of hut-tax.

'You are not Paul Kruger,' he said : 'you are only his servant. If he wants to talk to me, let your master come himself;' and the hut-tax has remained uncollected to this day, for the Boers have always shirked an encounter with the Magatese, whom they consider impregnable in their native fastnesses. Thus it comes that Magato's country has lain in undisturbed screnity, known perhaps to not more than a couple of hundred white men, including a handful of traders and recluses who, like the voyagers to the islands of the Lotos-enters, have fallen under the peculiar spell of this delightful earthly paradise. Having by some strange fortune survived its climatic dangers, they live lives of languid indolence, well content to forswear the overrated charms of civilisation for the leisured ease of this primitive existence. Among them are men of good birth and education, who have tasted the supposititious sweets of the advanced intellectual culture of the older world, yet choose to remain in this land of black skins and sunny skies, where a strange white face appears with the erratic and transient uncertainty of a meteor, and the faint echoes of the surge of the cities are borne by a tardy newspaper or a rarer letter at intervals reckoned by moons.

Of the circumstances that led these dwellers in the solitudes to forego their share of the heritage of the ages many strange stories might be written; but it would be easier to raise the hidden gold that is said to abound in the country than to extract the story of their past from some of these hermits. One or two have taken to the life as the outcome of a spirit of true philosophy or in disgust at the world for which they were originally intended. Others strayed thither after aimless wandering over the Continent, and settled down to the full enjoyment of a life of peaceful rest that amply compensates for the trials of bygone years. A few, attracted by the possibilities of speedily acquiring wealth by supplying the wants of the natives, have opened stores by the pleasure and will of the paramount chief-without which no white man can occupy land. Having made money in the course of years, they are now unable to shake off the habits and tastes that time has engrafted; so they remain, lords of as much of the earth as they wish to possess, having unconsciously learned that true happiness consists in contentment. It is perhaps impossible to convey to one who has not felt the strange spell of this subtropical climate any idea of its peculiar potency. A land where summer and winter are only distinguishable by greater heat and fewer cool breezes; by a period of heat and heavy rains, and followed by one of cool nights and brilliant days; a land where everything that the soil can produce has only to be planted and left to itself; where the orange, grape, pine, banana, and tomato grow wild, and increase under cultivation in a ratio that results in wicked waste, for the nearest market is as accessible as the north pole.

Such labour as may be required costs but the price of the least valued article in the store; but the native pays his employer in English gold for

the axe or spade with which he performs his labour. In a country where the necessities of life are obtainable with the minimum of effort it is not surprising to find the white inhabitants the victims of a mental and physical indolence hard for one fresh from scenes of activity to appreciate. It is difficult to realise the frame of mind of such a one who, though ardently curious to see the electric light, of which he has only read, shirks the three hundred mile journey to Johannesburg because it will interrupt his daily habits. There are educated white men residing among these Spelonkin solitudes to whom the wonders of the city of the Rand are as strange as to the Kaffir who visits it for the first time. One member of a historical Scottish family has never yet set eyes on a bicycle, and knows only of the South African railways by report. Yet it is not want of means or leisure that prevents him gratifying his sight by a glimpse of the progress that has taken place in the world since the far-off days when he settled down in his mountain home. He owns the finest 'salted' horses in the country, a 'spider' of the best American make, and sufficient oxen to carry his possessions to Capetown. But desire is dead; the spirit of lethargy has taken possession of him, and he is content to hear of these wonders from the far-off South while he lounges on his shady veranda, smokes his home-grown tobacco, and sips the coffee raised for him by the Kaffirs who reside upon his farm in a condition of easy

It may not be the highest form of either physical or mental existence, but its votaries appear to have attained as near to Nirvana as is possible for a European. Nor is it surprising that an unambitious nature should fail to see anything ignoble in seizing the chance to escape the toil and moil inseparable from the struggle for existence, and spend his days amid surroundings that have much to please and gratify certain temperaments. Perpetual sunshine, with no necessity for physical effort, has at all times produced a race of potential Lotos-eaters. Herein the drowsy calm of this lovely mountain region, where every prospect pleases, where a man may live the natural life in its most engaging simplicity, its occasional ruggedness ameliorated by many aids to civilised luxuryit would be unreasonable to expect aught else than a sluggish effort to avoid irksome exertion.

Even the task of money-making calls for no more energy than is requisite to take down from the shelf the wire or blanket required by the Kaffir customer, and once a year to go for a fresh consignment of stock to Pretoria or Johannesburg. It is more than likely, though, that the task will be entrusted to an agent, and personal effort spared by the payment of a commission. A well-regulated and rigorous monopoly assures profits such as would excite the surprise or scepticism of the trader in less-

favoured regions, and the acquisition of more than a competency is as inevitable as the budding of the peach-tree in spring. Set off against this the fewness of the traders' wants, clothing of the lightest and cheapest material, furniture sufficient to make the veranda the daily lounge and the bedroom a protection from the heat, and everything beyond is superfluous lumber. Does he wish to cultivate the land? He can have as many acres as he can sow for the asking -ay, even for the taking; land that has only to be scratched to yield the best that the soil can anywhere produce. His oxen graze over miles of rich veld, and his gun can always supply game that can be shot from the stoep of the house. He is practically monarch of all he surveys, free from the vexatious restrictions of 'law and order' so long as he keeps peace with the chief and does not offend his white neighbours by any breach of the lev non scripta of the scant but prosperous community.

Only one piece of alloy enters into the mass of his pleasures. It sometimes happens that accident or illness beyond alleviation by the family medicine-chest calls for professional aid, and it may be that much suffering is endured ere a doctor can be fetched from the hearest but distant dorp. But this does not arouse any desire to be within closer touch of civilisation. It only enforces the necessity for the maintenance of friendly relations with neighbours; for no one can be independent of each other's assistance.

A contemptuous attitude towards the ways of towns is characteristic of all these dwellers in the solitudes; and if one of them can be spurred up to the degree of energy necessary for conversation, there is no subject on which he grows so eloquently dogmatic as the superiority of barbarism—as he loves to call his life—over civilisation. But with the inconsistency of the faddist, his conduct is often a standing contradiction to his theories. It is rarely that he can throw off the old Adam sufficiently to be superior to the attractions of choice bits of furniture or gaudy apparel for his dusky womenfolk.

If there is no piano, there will be an American organ that awaits the manipulation of the stray visitor. Nor is literature overlooked. The English magazines find their way here in belated bundles, and one old hermit has received and read a North Scottish weekly for twenty-five years. One of the best collections of material for a South African historian is on the book-shelves of an old elephant-hunter who has not seen a town of five hundred inhabitants for more than a quarter of a century. The majority of these recluses are of Scottish origin. The German element is also represented; but the Englishman does not take so kindly to a life of consistent isolation. Every two or three years he pays a visit to the Rand; and one actually journeyed to England, but he

has lost custe and prestige in the eyes of his neighbours in consequence. They said he had brought back notions that would unfit him for the solitary life; and their prophecy is being fulfilled, for, when the chief recently gave a newcomer leave to settle within twenty miles of his place, he showed no resentment, and lent only a languid assent to the protest of the other residents, who see the possibility of their being crowded out by a few more white settlers.

Monotonous though the life may appear, it is not without distractions that would appeal to the most gregarious. Game is abundant, from the pretty springbok to the lordly koodoo and occasional lion and giraffe. The arrival of a party of visitors now and then gives excuse for a gathering of the neighbours and a relapse into the habits of effete civilisation in the shape of much superfluous eating and drinking. In the intervals life is made up of a succession of those minor trifles that prove as all-absorbing to those they concern as they are uninteresting to outsiders. It may be that a petty chief, or, more

serious still, a chief's wife, has to be mollified for the depredations of the settler's cattle in her mealie patch; or a party is arranged to shoot down the baboons that have grown too numerous for the welfare of crops. Thrice a year the traders hold a conference for mutual trade protection, which often results in a visit to the chief to forestall some projected opposition or trade rivalry. Permission to trade in Magato's country is not easily obtained, and those in possession of the monopoly spare no pains to preserve it intact. It is to them that the country owes its evil reputation as a fever haunt, and these stories have done as much as the opposition of the chiefs to keep out settlers and gold-seekers. The Boers long since gave up all attempts to combat the native hostility; and there is every reason for believing that this favoured corner of the Transvaal will long remain the blest retreat of its inhabitants, and the one spot in older South Africa where the pristine conditions of native life will remain undisturbed by the advance of civilisation.

A PASSAGE-AT-ARMS.

By W. E. CULE.



HE man from Africa did not think much of the Professor. From his place at little Mrs Arran's right hand he sometimes included the scientist in a casual glance, in which supreme self-satisfaction was slightly

tinged with contempt, but that was all. As the lion of the evening he could not afford to waste thought upon that quiet, gray, middle-aged man who had so very little to say.

With the Professor it was otherwise. He looked at the stranger more than once with curious if rather absent eyes, and at last made a remark: 'I seem to know the face.'

'Do you?' asked his friend Barrington, who overheard. 'Where have you seen it before?'

Professor Herne could not remember. He felt sure that he had seen those dark, strongly-marked features before; but he could not make the recollection clear. So, after a moment or two, he shook his head doubtfully and turned once more to his plate.

The man from Africa owned a loud and somewhat penetrating voice. He had been successful at Johannesburg, and possessed a large and seasonable selection of stories. Anecdotes of Rand life had far less interest for the Professor than the pebble inscriptions of prehistoric man; but he could not help observing that the new-comer was monopolising the attention, not only of the other visitors, but of the hostess herself. Somehow the knowledge depressed him, and he bent a little lower over his plate.

'I almost wish,' he said softly, 'that I had not gone away.'

'Eh?' cried Doctor Barrington. 'Why? You were not disappointed, were you?'

'Oh no,' was the reply. 'As a geological expedition ours was entirely successful. I was thinking of something else—a private matter.'

The doctor nodded and was satisfied, while the Professor mentally resolved to keep a better guard upon his tongue. It is perhaps permissible for a gentleman eminent in the 'ologies' to utter occasionally a few unconscious words aloud; but it is just as well that such words should be scientific terms, and altogether unconnected with matters of the heart.

'By the way,' said Barrington a moment later, 'our new friend has some good stories; but he does not tell all. If some reports be true he is not exactly the hero our hostess seems to believe him.'

'Indeed?' was the low remark.

'No. Herries, of the Rifle Police, has heard something of him. He is home on leave, and I met him in town last week. According to his account, our friend here got into trouble, more than once, through his queer method of managing certain obstinate blacks. He did not stop short of?—

Only the Professor heard the final words; and when he heard them his eyes seemed to harden peculiarly, and he gave another glance towards the head of the table.

'Ah!' he said. 'Is that so? By-the-by, what is his name? I have forgetten.'

'Rugman,' replied the doctor. 'I believe he intends to settle down at Hexminster. We shall be little the better for him.'

'Very little,' was the Professor's unusually decisive answer; and when it was spoken he fell into a train of thought from which his companion's remarks could not easily rouse him.

He saw the pleasant face of Mrs Arran turned constantly to that heavy, loud-voiced stranger with an interest and admiration which could not be denied. He had learned to appreciate that look himself, and had used many little arts to evoke it, succeeding so often that he had almost begun to regard it as a possession of his own. He had also learned to regard the seat at the head of the table, nearest to the charming little widow, as his own place.

Then the long vacation had taken him away on an important geological expedition to Iceland, during which his eyes had been partially opened to the value of those things which he had left so lightly. He had returned much more gladly than he had set out, dimly acknowledging now that Mrs Arran's face had more attraction for him than all the mysteries of the Tertiary formation. In short, he had returned with a large number of valuable fossils, a larger number of rosy hopes, and a still larger number of dreams, to his learned duties at the university and to Mrs Arran.

But during his absence the state of affairs had changed. The man from Africa had arrived at the old cathedral city on a visit to a friend, and had created something of a ripple upon those quiet waters. He had gained an entrance into that select circle which made Mrs Arran's table its favoured place of meeting, and had even won his way to the seat of honour. Alas for the Professor! There were whispers already abroad which people had never thought of uttering in connection with himself, for his homage had been too quiet, too obscure, too entirely modest, to be observed of the public eye. He had been supplanted, and the allegiance of the gentle, sweet-faced little woman at the head of the table had been given to another.

So he pondered, sitting almost in silence until the gentlemen moved to the drawing-room. There he found a nook where he was farthest from the sound of the strong and overwhelming voice of his supplanter, and sat down.

Presently he was aroused by a touch upon the sleeve. A rather delicate-looking boy of twelve had approached him unnoticed.

'Why, Jack,' said the Professor, 'I did not see you. How are you?'

Master Jack Arran shook hands, replied to the inquiry, and took his seat upon the arm of the chair.

'I'm glad you are back, sir,' he said heartily.
'Indeed! Thank you,' was the Professor's reply.

'Did you get any fossils, sir? You know you promised me some.'

The geologist smiled. 'Perhaps,' he said. 'You shall come to my rooms to-morrow and see.'

'You're awfully kind,' said Jack gratefully.
'Not like that man over there. He's quite a cad, I think.'

'Hem!' said the Professor warningly. 'Whom do you mean?'

'That Mr Rugman. He's from Africa, and he's never even shot a rhinoceros! He can only talk about Boers, and banks, and stocks, and shares; and he'll hardly talk to me at all.'

The listener smiled. Jack continued, still in a slightly indignant tone:

'You know, sir, you advised mamma not to send me away to school till I am fourteen. Well, Mr Rugman has been talking so much to her about it that I believe she has almost changed her mind.'

The Professor took off his eyeglasses and rubbed them with his handkerchief—an infallible sign that he was troubled. But Jack continued, confidentially:

'I wish you'd speak to her again, sir. She will do anything you say.'

Artful Jack! The Professor flushed, and promised that he would think about it. It was a blow to him that Mrs Arran had been so easily shaken in her resolves, and a long-dormant battle-spirit was beginning to move within.

'He's been talking about schools,' pursued Master Jack. 'He says that I ought to go to his old school—Castlebridge.'

'Eh? Wher?' exclaimed the Professor. And his start was so sudden that Jack almost tumbled from his perch.

'Castlebridge,' replied the boy. 'He says he was captain there once, and no end of other things. Oh, there's Doctor Barrington calling me! I'll be back directly, sir.'

The Professor sat back in his chair. He rubbed his eyeglasses once more, and then, glancing across the room, took a long, stern look at the face of the man from Africa. It was a gaze of sudden remembrance.

Mr Rugman stood with his hand upon the back of Mrs Arran's seat. There was self-confidence and satisfaction in his very attitude, and the lady's face was turned to his with that look which the Professor knew so well. It was a popular supposition, he knew, that most women admire masterly men, and Mr Rugman's appearance was decidedly masterly. Yet he thought of what Barrington had said, and the reflection connected itself curiously with a long-past experience in his own life. Then his face darkened. It was a good and pleasant face, and few had seen it under a cloud.

'She does not know,' he murmured. 'If she only knew! Yet all is fair in war—and in——Hem!'

Mrs Arran and the man from Africa were still speaking of Master Jack. The widow was framing certain faint objections.

'He is so very delicate,' she said.

'School would be just the thing, then,' was the

'Athletic exercises-regular confident assurance. life-plain, good food-just the thing!'

But boys are so very rough, are they not?' was

the next suggestion.

'Some,' admitted Mr Rugman. 'Such stories are greatly exaggerated. Elder boys in our great schools feel their responsibilities. When I was captain of the clubs at Castlebridge I was very careful'-

'Ah,' sighed Mrs Arran, 'I should feel so safe if Jack could only find a friend such as you must have been to the little ones at your school!'

Mr Rugman smiled contentedly. 'H'm,' he said with modesty. 'There are many boys quite as kind to the youngsters as I was'-

He paused, for a sudden hush had fallen upon a large group sitting near them. And at that moment another voice began, clearly, decisively:

'When I was junior master at a public school'---His words had been spoken to be heard by all. Mrs Arran looked up to listen, and Mr Rugman turned to see who had interrupted him.

It was the Professor. He had left his corner to join the large group near Mrs Arran. Somehow the same subject had drifted into the discussion here also, and comments had been made upon an episode in public-school life recently reported in the newspapers. The Professor had listened patiently for a while, possibly closing his ears to the strong voice of Mr Rugman close by. Then, in answer to a request of Doctor Barrington's, he had commenced to speak.

'When I was junior master at a public school,' he repeated, 'an incident occurred which seems to bear upon this question. It was a decidedly unpleasant case'-

Everybody was listening now, for the Professor had been known to tell a story well. Mrs Arran waited with awakened curiosity, but the man from Africa looked on with a superior and indulgent smile. Nothing told him that a battle-royal had commenced; no one warned him that this quiet, reserved-looking student was an old-time fighter who had not yet lost all his ancient skill.

'There was a boy in the school whom we may call Smith,' resumed the Professor, apparently unconscious of the general interest. 'He was in the sixth form, tall, strong, and athletic, a leader in all sports, and over eighteen years of age. There was another boy whom I will call Brown. He was a little fellow of twelve, quick and clever, but delicate and shy. He was remarkably good at recitation,'

During the last few words the story-teller had glanced casually at Master Jack, who was now standing beside his mother's chair. Mrs Arran saw the glance, and laid her hand upon the boy's arm. She also wondered at the strange hardness which seemed to underlie the Professor's slow, smoothlyspoken words. It brought to her mind the old simile of the hand of steel in a glove of velvet. She listened more closely then.

'This Smith,' continued the Professor, 'was a

very eccentric fellow, and remarkably fond of amusement. His amusement consisted in tormenting his young schoolfellow Brown, and some of his methods were as unique as effectual. He did not stop short of '-the Professor paused to give another glance around; then he concluded the sentence-'red-hot iron!'

Some one gave a little exclamation. It might have been Doctor Barrington. It could not have been the man from Africa, for he was gazing blankly at the Professor's face. The superior and slightly indulgent look had vanished some seconds before.

Smith, the story went on, would heat a poker in the class-room fire. Then he would follow Brown around the playground, penning him up at last in a corner between two walls. There, holding the poker well advanced, he would compel the boy to recite, with suitable gestures, long passages from Shake peare. If he proved obstinate the poker was moved forward, and he always gave in. As I have said, he was a shy and delicate boy of twelve.

The Professor paused again. Doctor Barrington muttered something in his beard, and Mr Rugman seemed to be listening with suspended breath. Mrs Arran had drawn Jack closer to her side, and several people noticed that the little widow

was pale with anger.

'It went on for a long time,' the Professor said soberly. 'Little Brown never said a word at home, though he spent all his holidays, all his leisure time, in getting his Shakespeare by heart. His condition of mind may be easily imagined. There was no humour in it for him. One day it came to an end. It appears that he had recited all that he knew, and was still ordered to go on. It may be that he pressed forward-it may be that the poker was advanced a little too far. It is probable that he was desperate—it is probable that the brute who tortured him was reckless. There was a shout, a sudden scream. The iron, fresh from the fire, had touched his cheek!'

The speaker's voice had been raised a little towards the end. It was very stern, and vibrated strangely, while there was a spark in his quiet eyes which few had seen there before. Doctor Barrington spoke again, so shortly, so abruptly, that no one thought well to notice. Mr Rugman stood silent, leaning forward; and Mrs Arran, sitting with her lips parted and her eyes ablaze, looked the very incarnation of outraged tenderness and indignation.

'A nasty incident,' said one after a long pause. 'Of course the brute was expelled?'

'He left at the end of the term,' replied the Professor.

'You called him Smith,' cried Barrington. 'Have you forgotten his name, the unspeakable bully? 'No,' said the Professor slowly, 'I have not

forgotten his name.'

He looked up once more. His eyes passed round the circle, resting for a moment upon Mrs Arran's

face, clouded and angry still, and then moving to another face behind her chair.

That was a critical moment, the last of the passage-at-arms. The bold eyes of the man from Africa did not fall at first, though the florid face had paled, and the strong hands gripped the chair-rail convulsively. But the Professor's look was cold, unflinching, threatening. He could not go further with his story; but his eyes did not say that, for he was waging this battle for all that he loved, those hopes and dreams which were already more to him than all the fossils of all the ages. And he won!

The man from Africa bent to whisper a word in the widow's ear. She was surprised, but had no opportunity to say so. There was a movement of the door-curtains, a heavy but hasty step in the corridor. Mr Rugman had deserted the company without even saying 'Good-night.'

'I have not forgotten the name,' repeated the Professor calmly. 'But it would serve no purpose to mention it now;' and he surveyed the circle with that benign smile which his friends knew so well.

Some time later our geologist, drawing on his gloves in the hall, was joined by a small boy, jubilant and eager.

'Oh,' he cried, 'I'm glad you told that story, sir! Mamma heard every word of it.'

'Jack,' said Professor Herne, 'you ought to be asleep.'

'1'm going,' replied Jack. 'But have you any more tales like that? Because if Mr Rugman comes and talks again to-morrow'—

The Professor smiled, and gently pinched the boy's ear. 'Don't worry,' he said. 'It is not likely that he will come to-morrow!'

Mrs Arran, descending the stairs behind, saw the action and the smile. Perhaps she heard the words too, or it may be that she had already guessed the truth. It is my suspicion that she had never really wavered in her loyalty to the Professor, but had wisely used the visit of Mr Rugman as a means of bringing her too-forgetful scientist more certainly to her side. If this suspicion be correct, it must be said that she had succeeded admirably, and had gained more than her point. Had she not seen her hero fight like a Paladin, and emerge from battle a conqueror? Had she not caught a glimpse of his heart, hidden so long beneath fossiliferous clay beds and layers of old red sandstone? Had she not, above all, seen something of its true tenderness, its warmth, its stern contempt for that which was small and brutal and cowardly? Yes, she too was a conqueror!

So the clasp of her hand was warmer than ever before, and though her sentences were few her face was eloquent. The charming Mrs Arran had a speaking method of her own, and the man who listened was satisfied indeed.

When the door had closed behind him he stood for a while upon the middle step, looking absently up the lighted close and struggling with the button of his glove. It was a troublesome button and required some management, so it is quite possible that his last remark referred to his successful struggle with it. The words were uttered just as he descended the lowest step of all: 'Victory,' he said softly, 'victory!'

RATTLESNAKE OIL.



EDICINES are frequently extracted from unexpected sources, and liniments from ingredients that would puzzle the most intelligent to discover how their efficacy became known. Perhaps the benefits de-

rived from some of the medicines in use at the present time are as much delusions as the cures ascribed by Chinese physicians to the frightful decoctions they compound, and the relief credited to a proportion of the liniments may be due in a great measure to the vigorous rubbing-in that plays an important part in the treatment. Like all else in this world, the popularity of medicines undergoes many changes, and their worth may be frequently estimated by the length of time they have remained in the public service. Judged by this standard, rattlesnake oil has some claim to consideration, for it has been looked upon for over a century by a not inconsiderable number of people as a sovereign remedy for many ailments, and to-day more rattle-

snake oil is rendered in the state of Pennsylvania in the farming communities, especially in the German farming communities, than has ever been. Internally it is taken as a remedy for hydrophobia, or rather as a preventive, if taken immediately after the bite and before symptoms of hydrophobia appear in the patient. Applied externally, it is believed to cure ringworm, sties, and sore eyes generally, and is particularly relied upon to relieve the most obstinate cases of rheumatism. That it is esteemed as a bond fide remedy, and not merely a quack nostrum, may be gathered from the fact that when rheumatism has failed to respond to the local physician's prescription, rattlesnake oil is resorted to by people who naturally look upon its use with horror, and in many cases it is said truly wonderful results have been attributed to it.

As might be supposed, the amount produced in the course of a year cannot be great when it is known that even large rattlesnakes in prime condition seldom furnish over two and a half ounces of

oil. But little of this finds its way into chemists' shops. It is for the most part carefully bottled and put away in the family medicine-chest for home use only. As a relief for the pains of rheumatism and for bad sprains, the application of rattlesnake oil is not confined to the state of Pennsylvania alone, but prevails more or less in a large number of the States. In California there are people who devote their entire time during the seasons when the rattlesnakes are plentiful to hunting them and rendering out their oil. A dangerous occupation, it might be supposed; but it is really not so, for the rattlesnake is perhaps the easiest discovered of any reptile. Not that its colour is bright and readily distinguished from its surroundings; on the contrary, it is dull and of a brownish gray that forms no contrast to the ground over which it crawls. There are two reasons why the occupation is not so dangerous as might be expected—the main one, owing to the rattlesnake's well-known habit of loudly rattling on the approach of an enemy, so that one is unlikely to tread upon it by accident; and then rattlesnakes are not often found in the grass. Occasionally they are discovered in hay-fields and in hedges, but their preference is for the stony sides of the mountains, away from shade and in the open, where they can bask in the sun on some rock and receive from below the heat that radiates from it. This preference is a kind intervention of nature, as nothing is more to be dreaded than a snake in the grass.

Soon after a rattlesnake is discovered and despatched, it is stretched on a board by a nail driven through its head and another through its body just above the rattles. It is then cut open and the fat taken out, which has very much the appearance of the fat of a healthy chicken. A piece of muslin is then stretched over a glass jar, which is placed in the sun. On this muslin the fat is spread, and as the sun renders out the oil it drips through into the jar, being strained at the same time. The oil is almost colourless and of the consistency of common machine oil. In order to tell whether the snake has bitten itself before death, which they are popularly supposed to do when not despatched at once, a little of the oil is dropped into a glass of milk. If the oil floats in one mass on the top without breaking up all is well. If, on the other hand, it separates into a number of minute beads, and the milk gathers into thick white flakes as though soured, the inference is that the snake bit itself, and the fat which was rendered into oil is consequently poisoned and dangerous to use. This being the case, the oil is taken out and thrown away, while the receptacle in which it was placed is carefully washed in boiling water before being used again for a further supply. Sometimes the rattlesnake is put to another use. Its skin is carefully tanned, and with the addition of a buckle makes a unique belt. Occasionally, also, in the western towns the skins are worked up into cravats, with the rattle attached to a pin, and on the frontier cowboys may frequently be seen with rattlesnake-skins nicely cured twined round their sombreros in lieu of the ordinary hatband. These latter uses are, however, of no great importance; but if only half that is said in favour of rattlesnake oil as a remedy for rheumatism is true, then it is doubtful if these death-dealing reptiles may not be counted among the blessings which come to mankind in disguise.

'AT PARTING.'

When we two meet hereafter
How shall we kiss again?
With luted lips of laughter
Or muted mouths of pain?
With eyes glad or regretful,
Remembering or forgetful?
When we two meet hereafter
How shall we kiss again?

You count your love by hours, sweet,
But I count mine by years;
And all your tears are flowers, sweet,
But all my flowers are tears.
A night will soothe your sorrow,
But mine must wake each morrow.
You count your love by hours, sweet,
But I count mine by years.

Your love is love of May-time,
And mine is love of June;
Your dreams are of high day-time,
And mine of afternoon.
I would not deem you faithless
Though spring is hardly deathless—
Your love is love of May-time,
And mine is love of June.

Look up, and say, 'Tis sweetness!'
Look down and sigh, 'Alas!'
This day has known completeness
Whatever comes to pass.
Long parting o'er us hovers,
But still we stand as lovers,
Look up and say, 'Tis sweetness!'
Look down and sigh, 'Alas!'

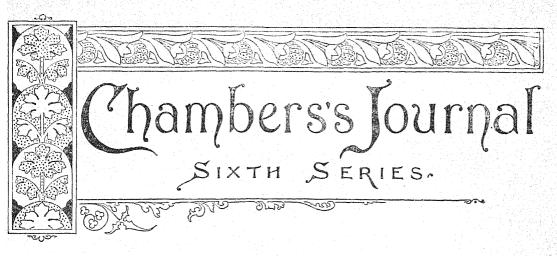
What can our hearts regret, dear?
What is there left to tell?
The day, the way, we met, dear,
The wood, the wishing-well,
The bird that laughed above us,
The flowers that seemed to love us—
What can our hearts regret, dear?
What is there left to tell?

It seems the worst of sad things,
This sundering of twain;
We see throughout all glad things
The tearful threads of pain.
They run through every pleasure,
They tarnish every treasure.
It seems the worst of sad things
This sundering of twain.

Oh! what are all sweet kisses,
And what are all soft sighs,
To sound the cold abysses
Where faith in absence lies?
Ah sweet, not love the flowerful,
But give me love the powerful—
And what are all sweet kisses,
And what are all soft sighs?

J. J. BELL.

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'MADE IN JAPAN.'



HE wonderful trade advances that have been made by Japan since the conclusion of the war with China should make our manufacturers and merchants keep their eyes open, or they may find some morning their

occupation gone in markets they thought they had secured. This enterprising people has in the past two years almost secured a monopoly in the Eastern markets of the match-trade. Some twenty or twenty-five years ago the import of matches in India and Burma was largely English and exclusively European. English imports gradually declined, being replaced by Swedish matches. These in their turn are being ousted by the Japanese match, equally good and sold at fifty per cent. lower prices. In Burma, a province which last year imported matches of a value of over five lakhs of rupees, or some £33,000, Japanese matches are almost exclusively used now. They pay an import duty of five per cent., and yet can be purchased retail in the streets of Rangoon at one anna, or about one penny, per bundle of ten boxes. The English match ten or fifteen years ago cost in Rangoon about five times as much, and at that time there was no import duty. Burma is a very damp country, with an annual rainfall varying from 100 to 200 inches. The English match in the rains was difficult to burn. If the box was kept in flannel it would ignite; but the wood of the match was thick and generally damp, and failed to keep alight. The Swedes first, and afterwards the Japanese, saw what was required, and made a thinner match, thus using less wood, and meeting the requirements of a province with a moist climate. Between them they have ousted the British match altogether; and a trade in this single Eastern province alone of a yearly value between £30,000 and £40,000, which will probably be doubled when the Rangoon and Mandalay Railway is extended to the borders of China (as it will be before the end of 1899), has been lost to England, probably never to be regained. The loss of the match-trade in India may be a

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small thing to grieve over, but where a single province of that great dependency takes in a year over £30,000 worth, manufacturers' profits must be something tangible over the whole area. In Burma and the surrounding countries nearly every man, woman, and child smokes, and matches are now to be found in the remotest Burman, Shan, and Karen hamlets hundreds of miles from the coast or railway communication. No jungle man or woman fails to provide himself or herself with a box of matches when they are so cheap. Their forefathers either borrowed a light from a fireplace in a neighbouring hut or procured fire by rubbing briskly two pieces of dried bamboo together, with some dried bamboo shavings-a process the writer, when foresting twenty years ago, often saw applied at an encampment on a wet night before supplies had been brought up by elephants, or when, as was often the case, the thick English match of that period was too damp to strike successfully.

Umbrellas, which were largely manufactured locally of oiled paper, are being supplanted also by Japanese articles, excellent copies of the European umbrella; and these are sold in the Rangoon bazaars at one rupee and four annas each, or about one shilling and eightpence. Similar umbrellas, before Japan took to manufacturing them. cost at least four times the price in Burma, and in this article, as in matches, no European country apparently can hope to compete with the Japanese in producing an equally good-looking and lowpriced umbrella. The Burmans are largely taking to the imported umbrella, whilst their own paper umbrellas are often patronised by Europeans as a good protection against sun and rain; although they are not so convenient to carry unopened as the ordinary umbrella, as they are too bulky when closed to be used as a walking-stick. The local article can be bought for eight annas, or about eightpence, and if carefully used lasts for one rainy season.

regained. Bicycles and sewing machines of Japanese make may be a lat half European and American prices have also [All Rights Reserved.] Feb. 12, 1898.

been imported into Burma from the Straits. Doubtless before long we shall have Japanese merchants, and possibly a Japanese bank, established in Rangoon. Several cargoes of rice have already been sent from the Burman rice ports to Japan; and that astute people will doubtless soon realise that the best way to push their manufactures and the cheapest way to buy their rice cargoes is to have Japanese firms established at the rising capital of Rangoon, where there will soon be railway communication to the confines of China itself, with its hard-working millions of population. Japanese clocks are now sold throughout the East; and Japanese coals are highly thought of in Bombay.

Whilst Englishmen offer equal advantages to every nationality in trade with the East, it is not a pleasant sight for Englishmen to see British trade passing away into the hands of the foreigner resident in British possessions.

A fair field and no favour' is a good motto, and one that in trade in British dependencies we have always endeavoured to carry out. If Japan can undersell us and make equally good articles, we cannot hope to persuade the consumer to buy English articles because they are English. An opposite policy has not proved such a success in Saigon and French Cochin China that we should ever think of or wish to imitate it. The British manufacturer may rest assured it is more

difficult to regain a lost trade than to keep an existing one. By having trustworthy agents on the spot, and by altering his manufactures where they do not meet the wishes and wants of his customers; by being obliging and courteous, in fact; and by having his goods always up to sample, he may hope, even in these days of keen competition, to do a good trade. But he must not lose sight of the fact that times have altered a great deal in the last quarter of a century, and that he has many competitors now where formerly he enjoyed almost a monopoly. Under such circumstances, if he wishes to keep and extend his trade in the East, he must prove that he can, like his competitors, adapt himself to circumstances, and not expect his Eastern customers to alter their habits and customs to suit him. In short, the best manufactures will win the most markets, and best includes goodnes, of the article as well as economy in price. We are a good many brisk competitors in Germany, Belging, and other European countries, not to speak of the Americans, all quite alive to the exigencies of the hour. But probably in the next quarter of a century we shall find articles 'Made in Japan' imported all over the East to a much greater extent than they are now; and it is to be hoped that we shall not have them (as in the matchtrade) eclipsing British manufactures.

JOHN BURNET OF BARNS.

CHAPTER XIII. OUR ADVENTURE ON THE ALPHEN ROAD.



E rode in silence for maybe halfa-mile, while I turned over the events of the evening in my mind and tried to find some way out of the difficulties in which by my own folly I found myself placed.

Nicol looked steadfastly before him and said never a word. By-and-by I found the desire for some one to speak with so overpowering that I up and asked him if he had heard aught of the events of the evening.

'Ay, sir,' said he. 'I heard ye had some kind o' stramash, but that was a'. I trust ye're weel oot o't.'

"Have you heard of my cousin Gilbert?' I asked.

'The Wastland lad wha used to come about the Barns? Oh ay! I've heard o' him.'

'I flung a glass at his face to-night,' said I.

'I hope, sir, that he flung another at yoursel'.' he said anxiously.

'No. He swallowed the insult and left soon after. He is not the man to let me off so easily.'

'Whew,' said Nicol, 'but that's bad. Wad ye mind, laird, if I rode on afore ye?'

'Why?' I asked.

'Cousins and sodger-folk are kittle cattle,' says he. 'I wadna wonder noo but that Maister Gilbert were ahint a dyke. I've heard tell o' some o' his pliskies in his ain land, and he's no' the lad to let a midge stick in his throat.'

I drew up my horse angrily.

'Nicol,' I cried, 'you are intolerable. My cousin is a gentleman of birth, and do you think he is the man to kill from a dykeside? Fie on you! you have the notions of a common roost-robber.'

Weel away then, laird, cries he. 'So be it; but I've little faith in your Gilberts for a' their gentrice. I ken their breed ower weel. But I maun ride afore ye, for there are some gey rough bits on the road, and I'm a wee bit mair sure in the saddle than yoursel', wi' a' respect to your lairdship.'

So the wilful fellow must needs ride before me, looking sharply to the right and left as though we were in far Muscovy instead of peaceful Holland.

As for me, I felt in no humour to listen to my servant's tales or do aught than think dolefully on my own matters. The sight of my cousin and of Mistress Kate had made me sore sick for home, and I could have found it in my heart once and again to take ship at the next sailing for Leith. But these thoughts I choked down, for I felt that they were unbecoming to any man. Yet I longed for Marjory as never lover longed for his mistress. Her bright hair was ever before my sight, and her last words on that February evening rang always in my head. I prayed to God to watch over her as I rode through the stiff poplars on the way to Leyden.

As for my quarrel, I cared not a straw for Gilbert and his ill-will, it having never been my nature to be timorous toward men. Nay, I looked forward to meeting him with no little pleasure, for it had long been an open question which of the twain was best at the sword-play.

'Maister John,' said Nicol, suddenly turning round, 'I saw twae men creepin' round that scrunts o' trees. I wis they mauma be after ony ill.' We were by this time nearing a black, inhospitable part of the land, where the road ran across a moor all covered with ferns and rushes and old trunks of trees.

'Ride on,' said I; 'if we turned for every man that crosses the path we should never leave our own threshold.'

He did as he was ordered, and our horses being put to the canter, covered the ground gallantly, and our spur-chains clinked in the silent night.

Suddenly, to my amazement, I saw Nicol fling himself back in the saddle while his horse stumbled violently forward. It was one of the most ingenious feats of horsemanship that I have ever witnessed. The beast stood quivering, his ears erect with fright, while I rode alongside.

'For God's sake, sir, take care,' Nicol cried.
'There's something ower the road, and if I hadna been on the watch it wad have been a' ower wi' as guid man. Watch, for ye may get a shot in your belly ony meenute.'

Now, as it chanced it was that lively canter which saved us, for the rogues who had set the trap had retired a good way, not expecting us so early. At the sound of the stumble they came rushing up from among the fern; and ere I knew, a pistol-shot cracked past my ears, and another and another.

Two went wide, one hit my horse on the ear and made him unmanageable, so that I stood there with my beast plunging and kicking, at the mercy of whosever had a fourth pistol.

Nicol spoke not a word, but turning his horse, dashed forward in the direction whence the shots had come. As it fell out, it was the best thing that any one could have done; for the robber, not expecting any such assault, was preparing to fire again. As it was, the fore-feet of the horse took one villain on the chest, knocking him senseless, and well-nigh trampling the life out of him. A

second gripped him by the sleeve, and attempted to drag him from the saddle, which plan would doubtless have succeeded had not my servant, pulling the pistol (which was not loaded) from his holster, presented it at the man's head with such effect that the fellow in fear of his life let go and fled across the moor.

By this time I had reduced my own animal to something like submission. I rode after Nicol, and came up just in time to see the third man of the band (there were but three; for, doubtless, they trusted to their trap for unhorsing if not stunning us) engaged in a desperate struggle. Nicol had him by the throat with one hand, and was endeavouring to squeeze the breath out of him, while he in turn had his opponent by the other arm, which he was twisting cruelly. Had my servant been on foot the matter would soon have ended, for the throat fared badly which those long, wiry hands once encircled; but being on horseback he dared not lean forward lest he should lose his sent. My appearance settled it; for the robber, freeing himself, at one desperate leap made off at the top of his speed, leaving his pistols behind him. There remained but the man whom Nicol's horse had deprived of his senses.

Fortunately the blow had not been a very severe one, for he was not long in coming to himself. There was some water in a little stagnant pool near at hand which Nicol dashed in his face, and in a little the man opened his eyes and looked up.

At the sight of us he started, and the events of the past half-hour came back to his memory. Then a look of sullen, obstinate anger came into his face, and he lay still, waiting for events to take their course.

'Who are you?' I asked.

He made no answer.

I repeated the question several times, and still the man kept his silence.

'Ye donnert scoondrel,' cried Nicol, 'tell us whate ye are, or ye'll hang the morn on the Gallows-hill at Leyden.'

Still the fellow would not speak.

'Let's tie him up,' said Nicol, 'and I'll ride wi' him on the horse afore me. He'll get justice when we win to the toun.'

But this was not my policy. I had other things to think of than bringing marauders to trial. A sudden thought struck me.

'I will try him another way,' said I to Nicol. 'Do you stand aside.'

The man lay on the ground where my servant's horse had laid him, with a belt round his legs, and his arms knotted together. I went up to him and stood over.

'Do you know who I am?' I asked sternly in as tragic a voice as I could assume.

The man stared sulkily, but did not speak.

'You fool,' I cried, 'do you think that thus you will circumvent me? Know that I am the

great Doctor Joannes Burnetus of Lugdunum, skilled in all arts of earth and heaven, able to tell divinations and prophecies, learned in all magic and witchery. I know all that thou hast done since thy birth, and thy father and grand-sire before thee, all the wickedness which shall entitle thee to eternal damnation in that place which the devil is even now preparing for thee. Yea, I can tell thee the very death which thou shalt die'—

'Stop, stop,' cries the fellow. 'Oh! most learned sir, spare me. I know thou knowest all things. I confess my sins. And, Oh! I promise you I shall

mend my ways. Stop, I pray.'

'There is still one ray of hope for thee,' said I, 'but I cannot give my word that thou shalt ever gain it, for thou hast advanced too far in sin already. But yet thou mayst escape, and there is but one way to set about it—namely, to tell me of all thy wickedness. I adjure thee by the sacred sign Tekel, which the Chaldeans used of old; by Men, which was the sign of the Egyptians; by the Eikon of the Greeks; by the Lar of the Romans. I summon thee by the holy names of God—Tetragrammaton, Adonay, Algramay, Saday, Sabaoth, Planaboth, Panthon, Craton, Neupmaton, Deus, Homo, Omnipotens; by Asmath, the

name of the Evil One, who is lord over thee and my slave—I summon thee to tell me all thy deeds.'

The man was frightened past all telling. He tried to crawl to my knees, and began a recital of all manner of crimes and peccadilloes, from his boyhood till the present hour. I listened without interest.

'Had any Scot a part with thee in this night's work?' I asked.

'No, there was none. There were but Bol and Delvaux beside myself, both Dutch born and bred.' My mind was lightened. I never really believed my cousin to have had any part in such a matter, but I was glad to know it for truth.

'You may go now,' I said. 'Go and repent; and may God blast thee with all His fire if thou turnest thy hand to evil again. By-the-by, thy name? I must have it from thy own lips.'

'Jan Hamman, your lordship,' said he.

Well, God pity thee, Jan Hannan, if ever I lay my hand on thee again. Be off now.

He was off in a twinkling, running for his very life. Nicol and I remounted and rode onward, coming to Leyden at the hour of one on the Sabbath morning—a thing which I much regretted.

COMPANY PROMOTING.



HE promotion of public companies has of late years attracted an increasing amount of interest, owing partly to the popular notion that therein lies one of the shortest ways to wealth; while its develop-

ment has been so great that few there are who directly or indirectly are not concerned. The individual proprietor is fast giving way to the board of directors, with its army of officials; the personal element in business is on the decline, and as a consequence employers and employed now meet together under the passionless supervision of the Board of Trade. But it is the object rather of this article to ponder over and to expound a few aspects of company promotion—the rights and the wrongs of it, the opportunities and the justifications for it, and the pitfalls and the snares surrounding it.

The promotion of public companies has furnished a conspicuous object lesson on the proverb 'A fool and his money are soon parted,' and has shown up in a far from pleasant light the avarice that underlies the nature of so many of us; while the enormous growth of negotiable security, the direct result of limited liability, has afforded an opportunity for the greatest legalised gamble the world has ever seen. On the other hand, the public company has produced the Director, than whom, when he is what he should

be-and he often is-there is no finer example of the public servant; it has occasioned the publication of profits, information invaluable to the consumer, that trading with glass pockets so desired by England's greatest prophet; it has brought about in many instances the union of interests of buyer and seller; it has checked hoarding, the gold pieces which formerly rusted in the stocking having paid the wages of the artisan, and stimulated the brains of the patentee to yet further marvellous achievement; in short, the public company has enriched industry an hundredfold, and has infused into property that invaluable quality, negotiability, enabling land and buildings, plant and machinery, stocks and good-wills to pass in the smallest quantities from one end of the country to the other, from one owner's pocket to another, with the ease and facility of sovereigns themselves. Many and many is the financial difficulty, and even ruin, which might with truth be ascribed to this very lack of negotiability; while limited liability has again and again smoothed the thorny path of the executor, and extricated him from the many prolonged and ruinous family quarrels which it seems so often his lot to contend with. In addition to all this, the public company has vastly extended the interest in trade. In a nation of shopkeepers, the retired tradesman has been in effect recalled to his counter; and from Land's

End to John o' Groat's there is neither village nor hamlet but has a stake in some industrial undertaking, whose fortunes are watched with a keenness and interest sufficient in themselves to provide a liberal commercial education.

With such an extended and extending scope of action, it is matter of congratulation to find that the public are gradually yet surely gaining experience in company flotation; but they still apparently have much to learn. They should understand that the flotation of a company is a sale differing but very little from an auction sale: the property is offered in attractively small lots to suit all comers, while the usual spontaneous eloquence of the auctioneer finds vent in the glowing descriptions to be found in the prospectus.

To follow the analogy yet further, the interest and character of an auction sale is largely determined by the name of the vendor, for it often satisfactorily disposes of the pertinent question, Why is the property offered? Similarly, when a public company is launched, Who are the vendors? and why is the property offered? are two points which should not be overlooked. It may be that an established business is to be acquired and extended, or that an amalgamation is to be effected; it may be patent rights or concessions are to be obtained, a scheme of exploration and development undertaken, or contracts to inaugurate a business taken over. Each class of flotation must therefore be criticised from a different point of view. Some are speculations, others investments; and while the intending investor ought to be safeguarded at every point, the speculator is entitled to no sympathy. In the case of the flotation of the established business, there is little difficulty in judging the capitalisation and the purchase consideration: the good-will must not exceed three years' profits, and the tangible assets must bear a proper proportion to the paper or good-will asset; and the working capital must be sufficient. But in this class of flotation the public need to know particularly why the property is offered and what the guarantees are for successful management in the future. In amalgamation schemes, to a great extent the same criticism holds good; but here there is a chance for the promoter to obscure the present actual earnings of the individual businesses, and to effectually exclude from view any weak reasons for disposal, by dangling before the eyes of the investor the enormous prospective profits to accrue from the amalgamation. In the first case, however, the occupation of the company promoter is nearly gone. A discerning public has squeezed him out, and his only chance is either to find a vendor who will sell his business for a sum far below its actual worth—a type of vendor, needless to say, almost as extinct as the dodo-or he must manipulate the figures or so dazzle the public with the glitter of the directorate as to turn

their heads; but fortunately his opportunities in this respect diminish daily. There are times and seasons, however, when the public throws rational criticism to the wind, as in the recent cycle boom; then the promoter reaches down the bad stock from the top shelf, looks out the stale parcels, and sells them by marking them up at double the usual price. In such times the public subscribes its millions in the feverish hope that the morrow may bring into the market a yet more thoughtless plunger; repentance only comes when the bank sends a polite note that the overdraft has considerably exceeded the limit, while at the same time the door of the safe can be with difficulty closed owing to the accumulation of scrip. The established business, in short, must now be floated direct from the owners to the public, for the latter naturally require that the owners shall be willing to take the risk and pay the cost of the flotation; and there is now, as a rule, no room in such cases for a promoter's

It is, however, in the flotation of patent rights and concessions that the Companies Acts seem best to fulfil their mission; and it is here, too, that the company promoter justifies his existence. A word or two might perhaps be introduced at this point on the company promoter himself, but there is an initial difficulty in the way-a difficulty of definition. Every individual who lives by his wits usually describes himself either as a commission agent, an accountant, a general dealer, or a company promoter—the latter probably if his liabilities are large enough-but he thereby maligns a profession honestly created by an honest demand, without which the public would often miss the development of a valuable addition to the standard of comfort. The promoter family is therefore a large one, and the cousinships therein taper out to many removes; consequently our remarks must be confined to the heads of families only. Of the penniless schemer we desire to say nothing: he rarely brings anything to a successful issue, and whenever he has wriggled himself into a promotion of any value he can usually be bought out for a few pounds. As a matter of fact, nearly the whole of company promotion is new in the hands of company promoting syndicates, and on very many prospectuses the name of this syndicate will be found figuring as the vendor who takes the risk of the promotion. It is on the boards of these company promoting syndicates that the real artist in the profession will be found, and the commercial ability of such men is unquestionably very great. As is usual in professions of which the public are ignorant, a much larger profit is attributed to such bodies than is actually the case. The risks are heavy which they undertake, and the result in ninetynine times out of a hundred is a profit in shares of the undertaking brought out. To recognise a

patent as not only ingenious but of commercial value, to put down cash for some far-away concession obtained by skill and tact after encountering dangers and perils to life and limb, to experiment with and nurse such, to offer with all the attendant risk and expense these wares to a fickle and uncertain public, is worth surely some substantial recompense; and provided that a prospectus truthfully sets out the salient features of such a patent or concession offered, the public has no right to squirm if the venture does not turn out a goldmine. With such companies the investor should have nothing to do. In fact he should keep religiously clear of the promoted company altogether. There are plenty of sound industrials floated direct, without intermediate profit, where the good-wills are reasonable and the board efficient, and where the dividend is not likely to drop below six per cent. Let the investor stick to these and leave the promoted company of patents and concessions to the speculator. At present it is to be feared the public has made no distinction between the one sort of company and the other, and possibly, having been bitten in some harebrained scheme, refuses to invest money in anything registered under the Limited Liability Acts.

Not only, however, is there in company promotion a danger to the investing public, but also to the proprietor of a business who is approached by an unprincipled promoter. Specious statements are made as to the amount of cash that will be paid as purchase consideration, and on these statements free options of purchase are given, the business—or amalgamation—is offered, profits published, and in the end the original vendor is told that he must, if he wishes the flotation to be a success, take nearly all his purchase consideration in shares instead of cash—shares perhaps in a large amalgamated concern the destinies of which he is unable to control. But experientia docet, and there are evident signs on all hands that the business of company promoting is narrowing down into reasonable limits, where the profit earned is commensurate with ability displayed and risk undertaken; and it will be cause for hearty congratulation when the Limited Liability Acts have even freer play and wider scope, provided that the opportunities of bogus and dangerous promotions are further hedged; and to be more effective should emanate rather from a discerning public than from Blue Book regulations, which can usually be evaded.

When the flotation of public companies is better understood, when the investor's company has been clearly differentiated from that of the speculator, it is more than probable that a large proportion of trust money will eventually find its way into sound industrials, and this for many reasons. Thus, the competition for trust investments is becoming most inconveniently severe, the result being an accumulation in money on deposit at the banks, which spells poverty to many beneficiaries dependent for a living on the interest of a small capital sum. Gilt-edged securities have been driven up to a prohibitive price, mortgages at trustee valuations are snapped up in a moment, while at the same time there are trading companies yielding with no risk five and six per cent. It is a growing custom to bequeath money in trust, and while little latitude can be given to trustees already in possession of their trusts, the innovation will probably come in the way of special permit to trustees to invest in certain companies complying with certain conditions, possibly as to proportion of reserve fund to capital, dividends paid during past five or ten years, or some similar provisos; it may be, in fact, that shares in public companies may come to be subject to valuation in a similar way to properties, and that trustees will be empowered to invest in mortgage debentures, possibly even shares, of such companies where the margin of security is approved of. One thing is quite clear, the development of the public company will eventually be synonymous with the development of commercial undertakings, and when such an end is achieved trust money cannot afford to lie outside of such wide-reaching and interestbearing securities.

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CHAPTER II .- ON THE WAY TO THE GOLDFIELDS.



T Juneau the Flaming Occident had landed her passengers for what was then known as the Alaska gold-fields. Thence, by water, they had travelled to Dyea; camped at the foot of the terrible Chilkoot Pass,

waiting for a whole week, anticat driving, icy clouds of sleet and whizzing showers of snow, for the weather to clear. And when the weather did clear, and the awful precipitous wall of snow

and ice loomed distinct and forbidding, towering high above them, the adventurers fell back in dismay. However, the difficulty had got to be faced, and Jim and Twilight Ben were among the first half-dozen who hazarded the ardnous undertaking. With the assistance of a party of Tagish Indians, the tents and baggage were packed to the summit over a trail of steps cut in the icy steep with the axes of the adventurers themselves. Often a single false step would have been fatal;

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but the false step did not happen. Once the summit was gained, the baggage was packed down the long ten-mile descent to Lake Lindermann; and, after long days of wearying toil and terrible suffering, the perils of the uppermost lakes were safely passed, the dangers of the White Horse Rapids left behind, and, three miles below, the raft on which the hardy argonauts had transported themselves and their baggage for the last fifty miles was poled to the side at the head of the White Horse for disembarkation.

There is a spot in Yorkshire that must be very familiar to many readers of this story, for poets have sung of it and painters have limned its romantic beauties for generations-the 'Strid,' at Bolton Woods. Here the river Wharfe gathers its wide, rapid waters together to hurl them in one swift, seething torrent through a narrow cleft in the solid rock scarce four feet wide. The White Horse, on the Lewes River, is a magnified 'Strid' on a stupendous scale. It is a chute through a deep gorge of some forty yards only in width-a 'box canon'-and yet along that pent-up channel leap, with one long, frenzied bound, the concentrated forces of a river which is six hundred feet across immediately above the A few foolhardy dare-devils have attempted the passage of this awful spot, but only one or two have lived to tell the tale of their idiotic exploits. Although the gorge is but a hundred yards or so long, even an empty raft sent through is usually torn to pieces, and the travellers, after packing their outfit overland for this short stage, have to build another raft or boat below to carry them on their farther vovage.

It was at the very head of this chute, where the current begins to run strong, and the wide waters gather for their maddening plunge, that the raft was moored to the bank by a single rope. The whole of the baggage had been transferred to terra firma, and most of the little handful of prospectors had landed. The only man left upon the raft was Jim Vickerson, and, just as he was about to follow, a loud crack was heard. The rope had snapped, and with the sudden jerk Jim slipped, fell, and, striking his head against a projecting log at the end of the raft, tumbled senseless into the icy waters of the river.

Blind to the peril of the situation, and filled only with thoughts of a similar nature to those which would occur to a farmer on seeing his only useful horse in imminent danger of slipping its hip or breaking its leg just at the beginning of harvesting, Twilight Ben, with a savage oath, sprang back on to the gently-receding raft, and as Jim's unconscious body rose, grabbed it wildly by the collar, and attempted to drag him on board. But Jim was big, heavy, and unwieldy; it required all the old miner's strength and some moments of precious time to pull his helpless burden into safety on the logs; and when, having

done so, he turned to the shore, the full terrors of their position swept appallingly across his brain. For already the raft was in the tow of the swiftening current, and had drifted a score of yards away from the bank, where his awestruck companions stood, spell-bound with horror, rooted to the spot. All escape was cut off. Even a strong swimmer could never have reached shore across that swiftly-flowing stream, and Twilight Ben was no swimmer. In his fury his first mad, vengeful impulse was to pick up the inert body of the unhappy cause of the mishap, and hurl it to certain destruction in the gathering stream. Fortunately for the unconscious man, discretion came to the grizzled rascal. There was just a chance of running the chute successfully, and in that case one live Jim would be worth more to him than a hundred dead ones. It was all the work of a second or two. In a trice he had snatched the broken piece of rope that was still attached to the rude craft, passed it twice round Jim's body as he lay right in the centre of the mass of floating lumber, and once round a logof the raft. Then, throwing himself across the prostrate figure, he whipped the rope round his own waist, hitched it round another log, and twisted the end tightly round his wrist. In this position, with one leg firmly bent round a stanchion, he put every ounce of his strength into one mighty effort to hold on for dear life; and the next instant, whirling, plunging, tossing, they disappeared from the terrified gaze of their fellow travellers, and were swept into the jaws of the watery hell.

The lumber of which the raft was built grouned and shivered under the terrific strain of the furious race; the frowning bluffs to right and left flew past in one confusing, hurried blur; and yet the grim old miner kept his steely grip and held on. Tilted this way and that, the sport and plaything of the frantic torrent, the raft shot the first half of that fearsome death-trap in comparative safety; but at this point a huge swirl in the current caught the frail craft in its resistless power, and, flinging it like a chip, caused it to impinge with a thrilling shock against the nearest bluff. For one brief fraction of a second it paused, quivering from the impact, but it held together; and, though his toes were ground cruelly between a couple of logs, and the rope chafed deep into the raw flesh of his straining wrists, Twilight Ben still hung on and never relaxed his grip. Then, with a sickening whirl, the overpowering flood dashed the raft along its headlong course. With lightning speed it slid down the watery incline and plunged beneath the horrific chaos of wild waters. Raft and crew disappeared beneath the raging conflict. In the darkness of immersion, the thundering surge sang wildly in Twilight Ben's ears. A thousand demons of the angry flood were dragging remorselessly in every direction. The icy waters chilled his marrow. Still,

with aching muscles, he kept his grip; and, when that agonising moment had passed, and the raft, which had happily remained right-side uppermost, once more returned to the surface, the blood was spurting from his eyes, ears, and nose as the cost of his effort. Even then he did not realise that the chute was run, and they had passed out from under the shadow of an awful death. Borne on the quieter waters below, the raft at last caught a big snag, and was floated quietly into a side eddy. Here the other miners, who had hurried from above on foot, found them, and still Twilight Ben, with catlike tenacity, was clinging with unrelaxed grip to the craft, for, numbed and paralysed, he could not leave go his hold. Willing hands lifted them ashore and forced brandy between their teeth.

'I guess I'm a mighty pore hand at fixing up my thoughts into words,' began Jim in a quavering voice some hours later, after he had regained his wits and had learned the facts of his marvellous escape; 'but I ain't ongrateful—I ain't ongrateful. I owe my life to you—to you'—

'I calkerlate I ain't no more'n a ornery cuss at chin-music myself,' responded Twilight Ben, with a face and tone as emotionless as a Hindu god's; 'but you're on it this time, pard—right on it.'

'Yas,' Jim went on in queer little jerks, as the corners of his mouth twitched with the intensity of feeling his tongue could not relieve; 'you've saved my life at the risk of yo'r own—me, a stranger, and you risked an awful death fur me! Gosh! What did you do it fur? I dunno how to thank you, but little 'Linda will—ay, and the Lord will too; for "insomuch as ye did it unto one of the least of these":—

'Cheese it, pard,' interrupted the other, 'I don't quite catch on to them high-toned notions. I calkerlate I jest did my level best to fish you out 'cos I couldn't afford to see you pass in yo'r chips—lestways not jest yet,' he chuckled to himself. 'Durn my pesky old hide, ef the young jay don't take me fur a phil-anther-feest! Ez ef I'd ha' been sech a lop-eared idjet ez to risk one j'int of my little finger fur his hull carcass, ef I'd ha' knowed it! Anyhow, I calkerlate it suits the lay I'm on, and I ain't agoin' to throw up the keerds when luck deals me a good hand—skursely!'

It pained Honest Jim to hear the old reprobate's irreverence, and yet, at the same time, his apparent modesty roused his admiration to an enthusiastic pitch.

'Couldn't afford to lose me!' he gasped, seizing Twilight Ben's hand in his fervent grip. 'And I've done nuthin' fur you—jest nuthin'—'cept put you to a power of trouble to help me git my hoofs toughened, ez you say. It's ontrue—ontrue! You jest say thet outer yo'r good-nature. It's me w'ot can't afford to lose you!'

Poor, deluded, honest Jim! The savagery of Twilight Ben's outward man was lost upon him, and through it he saw only beneath the outward ugly mask a wealth of rugged nobleness and generous heroism, where, in reality, there lurked nothing but incredible meanness and foul treachery.

With some repairs the raft was made to do duty again, and carried the little band of adventurous voyagers some eighty miles farther on their perilous journey. At the foot of Lake Le Barge, having already travelled nearly three hundred miles from Juneau, they made a camp and commenced boat-building operations. What with collecting the lumber for this purpose, squaring the logs, sawing them into boards, building and caulking the craft, nearly a fortnight was spent here; and then, safely shooting the Five Fingers and Reef Rapids, the party, without any further serious mishap, floated down to Fort Cudahy, on the Forty Mile Creek, the then centre of the mining operations.

By this time the Western Wolf had so far gained the ascendency over the Kansas Lamb that it required no persuasion to prevail upon Jim to throw in his lot with the old miner, and work a claim in partnership. Very little time was spent in prospecting, and within a fortnight of reaching Fort Cudahy, the ill-assorted pair had staked out their claim on the Forty Mile, pitched their tent, and were hard at work. At first they employed hired help; but the price of labour was high, and the pay-dirt yielded next to nothing. Outside help had to be abandoned, and the owners of the claim slaved on alone, wearied with incessant toil and worried by mosquitoes. Above and below them, luckier men were taking out from thirty to sixty dollars a day, while, now and again, they chanced upon a day that was marked with a good-sized nugget. As for Jim and his chum, ill-fortune persistently stuck to them. More often than not the gravel they dug was not worth panning out, and their best daywhen they struck a tiny pocket of coarse goldyielded only twenty dollars. The strain of expectation unsatisfied, of invariable disappointment, coupled with the bitter hardships of unaccustomed privations, told severely on the young Kansas farmer; and, day by day, one brick after another toppled down from the airy castle he had fondly built, until the ruins encumbered his brain; and over and among those ruins, in the nightmare that haunted him the moment he closed his eyes for a few hours in his hammock, he chased 'Linda-little 'Linda-while heavy weights clogged his feet, and every moment, despite his desperate efforts to overtake her, she sped farther and farther from him. Then he would wake with the cold sweat of anguished fear upon him, and return to his heavy toil unrefreshed and despondent.

Twilight Ben regarded the discouraging state of

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things more serenely. The hot blood of love did not gallop scorching through his veins. For him there was no memory of a waiting dainty little school-marm to good on the fiery fever. True, though, he was working for the attainment of his earthly elysium—a paradise of unlimited cutthroat euchre and draw-poker, filled in with the soul-soothing anticipation of being put to bed every night as full of whisky as he could comfortably hold. Moreover, in one sense his disappointment was really twice that of Jim's; for, while the latter only calculated on one moiety of the products of their labour as his share, Twilight Ben reckoned the whole of the joint earnings as his. And so he slaved doggedly on.

By-and-by came rumours that rich pay-dirt had been struck on Glacier Creek, on the Sixty Mile River, prospects showing a dollar, and sometimes more, to the pan. Along with some other miners on the Forty Mile, Jim caught the new infection, and would have left for the latest reported Colchos; but Twilight Ben, with a discretion begotten of riper years and former experiences of rushes, held him back.

'Say, pard,' he observed, 'don't you be in sech a pesky blamed hurry to bulge over to Sixty Mile till we've wrastled with this yer claim some more. Luck runs durned streaky, and I reckon thet's jest how the gold lies on these yer bars, this yer being a bed-rock creek. Thar's been pockets found above and below on jest sech prospects ez we got, and thar's pockets right here—somewhar—I'm tarnation shore. So, we've jest got to hump ourselves and go in bald-headed, and you bet yer gum-boots we'll tumble right on 'em ker-slap.'

For a while this cheering assurance had an encouraging effect upon the younger man; but his malady—for malady this terrible depression of spirits truly was—merely relaxed its grip a little, while it still kept its fingers upon him.

Then cames September, and with its coming the thermometer suddenly dropped. A log hut was hastily built and well banked. The Ice King breathed upon the land, and the waters of the rivers became chained in their channels; snow covered those trackless desolate wilds; the Northern Lights flamed in the heavens, and the dark, silent terrors of the arctic winter, with its

wearying succession of dawnless days, fell upon the earth. For lack of water no dirt could now be washed, and all that could be done was by means of thawing the gravel with fires and drifting, to dig out the pay-dirt and throw it up into a pile ready for washing as soon as the return of summer opened the rivers.

The rigours of that awful eight-months winter were hard enough to be borne; yet a thousand times worse was the horrible doubt-the racking uncertainty-as to whether they were 'shovellingin' rich pay dirt or helplessly wasting their strength for nought, by throwing away the desperate labour of two-thirds of a whole year in digging out gravel that would not even pay for the washing. With his ever-haunting fear upon him, the fever of his curious sickness burned within Jim with redoubled vigour, and it was only his exceptional constitution and sheer doggedness that bore him through the dark ordeal, until the sun shone once more upon their icy prison, and released the waters of the Forty Mile Creek.

Gaunt and haggard, like the ghost of his former self, he mechanically set to work with Twilight Ben to wash the accumulated pile of pay-dirt. Pay-dirt? It was nothing but a hitter mockery to call it that, so poorly did it pan out. Yet the miserable yield did not come as a shock to Jim, for he had dejectedly persuaded himself long before that failure was certain; only it deepened his gloom a little. After working almost incessantly for three weeks at the sluice-box, the golddust buried in a tomato-tin under one corner of the hut amounted to no more than five hundred dollars, or about half the amount of their original outlay in travelling expenses, outlits, and provisions. Pining for a sight of the little schoolmarm at Oloville, and sick at heart, Jim flung down pick and shovel.

'I jest can't stand this any longer. I'm going to quit,' he remarked dejectedly. 'I reckon there's enough of my share of the dust to git me back to Kansas.'

Twilight Ben made no audible response, but murmured to himself, 'Which this yer move don't quite suit my game, and I calkerlate I've jest got to chip in and to trump this yer young galoot's trick afore he spiles my hand.'

CONCERNING CHEMISTS.



OES the profession of chemist offer many attractions to our youth?' we have often been asked; and because we are of opinion that it does we think it worth while to call their present attention to it. What

may be the net income of a fairly prosperous pharmaceutical chemist we have no means of knowing;

but we are inclined to think that it is most substantial, despite the fact that a 'drug in the market' has become proverbial in its expression. As to the salaries drawn by analytical and consulting chemists we could speak more definitely if we considered it necessary. Suffice it to say that they are most liberal—and, accordingly, most desirable. But apart from monetary rewards

and considerations, the profession of chemist offers many attractions. Chemistry is in itself a most interesting and valuable study; its devotees are continually meeting some new and fascinating problem, and the possibilities lying before them are endless. Every day seems, indeed, to bring forth some new discovery.

The science has made great advances since the days when the alchemists strove to transmute other metals into gold and vainly searched to discover the elixir of life. 'The world was young then,' we say; but we know that the philosopher's stone has not yet been discovered! Alchemy, or alchymy, we may regard as the infant stage of chemistry, just as astrology was that of astronomy. A 'druggist' was originally one who dealt in dried roots or herbs, and vegetable substances still hold an important place in the manufacture of drugs, so that the name is even at the present day a truly correct and expressive one; and 'druggist' is also the name most commonly used when reference is made verbally to a dispenser of potions and poisons.

Now, any person may set up in business as a shoemaker or grocer, but it is not every one who can open shop and call himself a chemist and druggist. In fact, the profession of pharmacy is a most distinct and responsible one; and in order to qualify for the fulfilment of its duties a youth has to pass a series of hard examinations. The law upon the matter is very rigid, and we naturally agree that, in the public interest, it should be so. Many who have given attention to the question claim that it ought to be even more severe than it is, and that no one should be allowed to commence business on his own account unless he is qualified as a 'pharmaceutical chemist' and not merely registered as a 'chemist and druggist.' But this is purely matter of opinion, into the discussion of which we shall not enter. Yet we venture to counsel every boy-and every girl, for why should not girls become dispensing chemists?--who may have resolved to enter this profession to make up his mind to work for the higher diploma, and not to stop short at the lower. Where means and opportunity offer, there is nothing to hinder the aspirant from qualifying as an analytical and consulting chemist; indeed, we know cases where this has been done.

Before accompanying the apprentice chemist through his examinations we shall glance briefly at the constitution and powers of the Pharmaceutical Society of Great Britain. This was established in 1841 for the purpose of advancing chemistry and pharmacy, and for promoting a uniform system of education of those who should carry on the business of a chemist and druggist. Two years later the society was incorporated by royal charter, and its powers were extended and confirmed by the Pharmacy Act of 1852. This act established a distinction between qualified

and unqualified persons, but did not otherwise interfere with the sale of drugs or with the dispensing of prescriptions. The society was empowered to appoint examiners, from whom all future candidates were to obtain their certificates of qualification prior to registration. The register is printed and published annually.

So matters rested until the year 1868, when the law once more stepped in. We may quote from the Pharmacy Act of 1868: 'It shall be unlawful,' it says, 'for any person to sell or keep open shop. for retailing, dispensing, or compounding poisons, or to assume or use the title "chemist and druggist," or chemist, or druggist, or pharmacist, or dispensing chemist or druggist, in any part of Great Britain, unless such person shall be a pharmaceutical chemist or a chemist and druggist within the meaning of this act, and be registered under this act.' Thus a new class of persons was recognised and placed upon the register as 'chemists and druggists;' the 'pharmaceutical chemist' is registered under the act of 1852. The act was amended in 1869, and all legally qualified medical practitioners and members of the Royal Veterinary College, registered as such, were exempted from the restrictions imposed in regard to the dispensing of medicines.

The powers of the society do not extend to Ireland. In 1791 the Apothecaries' Hall was established in Dublin by act of parliament, and all apothecaries were examined as to their qualifications by the directors of this institution. An act to regulate the sale of poisons in Ireland was passed in 1870, and five years later a Pharmaceutical Society of Ireland, induing it with powers similar to those of the sister society of Great Britain. This act of 1875 was considerably amended in 1890; and, everything considered, all three kingdoms may be regarded as on an equal tooting in respect of the qualifications and registration of their chemists and druggists.

It is distinctly advisable for a boy to obtain a pass in the first or general knowledge examination before being apprenticed. The subjects prescribed are: (1) Latin: grammar, translation from Cæsar's Gallic War, Book I.; or from Virgil's Æncid, Book I., and easy retranslation; (2) arithmetic: numeration, simple rules, fractions, proportion, percentages and stocks, and the metric system; (3) English: grammar and composition, with special attention to spelling and handwriting. The fee is two guineas, and the examination is held four times a year, on the second Tuesdays in January, April, July, and October. There are five centres in Scotland (six in July) and thirty-one in England (thirty-four in July). The tests set are very thorough, and the marking of the examiners is severe. We consider it advisable to state this because very many are misled by the simplicity and narrow range of the subjects prescribed. The board of examiners

are empowered to accept in lieu of this examination a certificate of having passed in Latin, English, and arithmetic at the junior or senior local or at the matriculation or degree examinations of any of our universities. All three subjects must have been passed at one examination. Successful candidates may be elected 'students' of the society on payment of an annual subscription of half-a-guinea. This entitles them to be supplied free of charge with the society's Journal, besides giving them other privileges.

The other examinations held by the society are the minor, which qualifies for registration as a 'chemist and druggist,' and the major, which qualifies for registration as a 'pharmaceutical chemist.' These are both in writing and orally, and are held in London and in Edinburgh four times a year. Before entering the minor the student must have attained the full age of twentyone years. At the same time he must produce a certified declaration that for three years he has been registered as having passed the first examination, and has been employed as an apprentice or student, or has otherwise for three years been practically engaged in the translation and dispensing of prescriptions. The subjects of examination are: chemistry and physics, botany, materia medica, pharmacy, practical dispensing, and prescriptions. The council recommends that all candidates before presenting themselves for examination should receive a systematic course of instruction occupying a period of not less than six months; and that such period of study should include at least sixty lectures in chemistry, eighteen hours' work in each week in practical chemistry, forty-five lectures and demonstrations in botany, and twenty-five lectures and demonstrations in materia medica. These figures represent the minimum courses recommended; indeed. it is much more than a mere recommendation, for no student need expect to obtain a pass without undergoing such training. The examination fee is five guineas, and successful candidates may become 'Associates' of the society.

Those who pass the major examination may become 'Members,' and as such are entitled to a seat in the council or on the board of examiners. The fee here charged is three guineas, and an annual subscription of a guinea is required from Members. The subjects of examination are the same as those for the minor, but necessarily much more advanced.

Regarding apprenticeship, the usual term is five years. During this time the apprentice will receive merely nominal wages, and it should be his own outlook to get under a good master, who will, of course, assist him and direct his studies for the minor and major examinations. The cost of six months' special training would run from fifteen pounds at private classes in Edinburgh, to, say, thirty pounds at the society's School of Pharmacy in London. This school is very efficiently

equipped, the lectures are given by eminent professors, and chemical and research laboratories are attached, as well as a museum and a library containing over ten thousand volumes. In Edinburgh also a museum and a library have been established at 36 York Place. Medals and scholarships are yearly competed for, and altogether the apprentice chemist has every inducement to prosecute his studies. The diploma and other examinations are open to women equally with men.

We may now take leave of the Pharmaceutical Society, and turn to consider the diplomas of the Institute of Chemistry of Great Britain and Ireland. This society was founded in 1877, and incorporated by royal charter in 1885. Its objects are to promote the better education of persons desirous of qualifying themselves to be public and technical analysts and chemical advisers on scientific subjects, to examine candidates and to grant certificates of competency, and to elevate the profession of consulting and analytical chemistry by setting up a high standard of scientific and practical efficiency, and by requiring on the part of its members the observance of strict rules in regard to professional conduct. This last object is gained by the certificates granted by the institute being renewed every year. Public analysts, professional chemists in works, and analytical and consulting chemists in general are among its members, and, indeed, it may be said that the best situations obtainable in the profession are held by its diploma-holders.

The diplomas granted are Associate (A.I.C.) and Fellow (F.I.C.). No person is qualified to become an Associate until he has attained the age of twenty-one years, and unless he has passed through a course of at least three years' study of theoretical and analytical chemistry, physics, and elementary mathematics, and has passed such examinations in the several subjects as are prescribed by the council of the institute. In order to become eligible for the fellowship an Associate is required to have been continuously engaged for a further term of three years in the study and practical work of applied chemistry.

At present there are three examinations for the associateship. The first is that required to be passed by medical students prior to registration, or its equivalent. Then study may be prosecuted for three years at any university or approved college. Those who become 'students' of the institute require only two years at such classes; but they must in addition have been engaged for two years in the laboratory of a Fellow. The second examination is in theoretical and practical chemistry, the practical tests occupying about four days. Those who hold a B.A. or B.Sc. degree of a university with honours in chemistry are not required to undergo this examination. The fee is two gaineas.

The final, for which a fee of three guineas is required, is a thorough test in analytical chemistry.

The candidate may select one of the following divisions of the subject: (1) mineral analysis; (2) analysis and assay of metals, especially alloys; (3) gas analysis; (4) organic analysis, including combustions; (5) analysis of food, water, and drugs. Success here earns the diploma A.I.C.

An entrance fee of four guineas is charged for the fellowship. We have already stated how an Associate may obtain the higher diploma; candidates who have not been Associates may be required to pass one or more examinations. In those cases where they have not received systematic instruction in physics, the council may require evidence of sufficient knowledge in the subjects of light, heat, magnetism, and electricity by graduation in science at a university. We hope to have sufficiently stated the leading lines while omitting the details, for we wish to show that the diploma F.I.C. is a most desirable one. It

indicates not only sound scientific training, but much practical experience and general trustworthiness in all that relates to the practice of the profession. As a consequence it possesses a very considerable value.

We would add a final warning to the aspirant. Everywhere around us are the signs of advancement, and examinations are yearly growing harder and competition more keen. Anything worth striving for can only be got by determination, energy, and systematic work. There must be no impatience at the slowness with which success comes, for the success which remains and is satisfying is usually the result of, it may be, years upon years of plodding. Our ultimate happiness is the final reward of the exercise of self-denial and of the cultivation of moral strength, which, indeed, gives intellectual vigour and physical well-being.

A WEST INDIAN HONEYMOON.

By Major T. Preston Battersby.



HAT sort of a place is Santos, captain?' I asked, partly because I really wanted to know, but partly also because the cabin of the steamer was stuffy and cockroachy, and the sea rather rough, and I

had just been served with a liberal plateful of hot plum-pudding with cream sauce, which in the tropics is a dish that requires reflection.

'Santos!' said the long-limbed Yankee captain, with a humorous side-glance at my untouched plate, which showed he quite understood the situation. 'Santos, sir, is hell upon earth when Yellow Jack is abroad, and not much better when he isn't.'

'How so?' asked I, motioning furtively to the steward to remove my plate, and shifting my chair a little so as to get the benefit of the tradewind through the open port. I was on board a little tramp steamer, making the trip from Barbadoes to St Lucia, at which latter island I had a few hours' inspection-duty to fulfil, which would have entailed a wait of a fortnight had I gone by the regular mail.

'Well, sir, it's this way. First and foremost, it's a big port and hundreds of ships put into it. It is a hot, dirty, damp, unhealthy place, with fifteen thousand inhabitants. And the fools have only built two wharves to load and unload at; you must take your turn. Eight months I have known a barque lie at anchor in the harbour waiting her chance.'

My face must have expressed incredulity, for my nautical friend here stopped his story to remark, 'I guess you don't believe me, stranger. Steward, bring the officer another help of pudding,

I assured him that I believed him implicitly, and, indeed, I found afterwards that the information he had given me was perfectly correct. I also declined the pudding, and begged him to continue, which he did after smiling a grim smile.

'I was there in 1891; we put in on our way to New York. I thought there would be a good chance of picking up a few passengers whilst the fever was on, and so I did; but we paid dear for it. You see, they had cholera there that year, as well as Yellow Jack, and the harbour was full of ships that couldn't get away, because they had no officers left to navigate them and no crews to Seventy-nine captains and six or man them. seven hundred sailors had died when I got there, and I calculate many a naval action wouldn't have cost as much. I'm not easily frightened myself, but I can tell you I thought it was time to go when I went ashore one evening after dark, and the first thing I did was to trip up over a body lying across the street, and fall with my face right in the waistcoat of another gentleman who had just died where he lay of Yellow Jack. The one I tripped over had died of cholera, as I could see when my mate brought up the lantern!'

I stared at him in amazement, but the man was quite serious; he did not seem to think that he was narrating anything at all unusual. From what I have since heard of Santos, I do not suppose he was,

'Well, sir, my first mate was with me, and he

said he felt sick, and went and got some rum to keep his pecker up. It is a bad thing to drink rum in Santos. Next morning he and six of our passengers were dead. I wanted to bury them decently on shore or in the harbour; but the fools that called themselves the government wouldn't allow it—as if one dead body more or less mattered then; so I made the engineer get up steam, and we sewed the corpses up in sail-cloth, with plenty of scrap-iron, and lashed them out over the gunwales, and so we went out to sea. The niggers we passed in the fishing-boats howled that we were a death-ship.'

'I should think you were!' said I.

'We were afterwards. When we got a mile or so from land I read a few prayers, the best I could think of, and then a man went round and cut the lashings, and we laid our course for New York; but you bet we had a time of it before we got there. We took the fever with us, and we had no doctor on board; and it would not have mattered much if we had had. The crew went mad one after the other. It began with the firemen; they dropped down dead with the shovels in their hands. Then one man with the fever on him jumped overboard to get out of his misery. After that they all did. I put some of them in irons when they tried it, but they just died raging mad in a few hours, so I gave it up. We only landed one man at New York, out of all the passengers we took on board at Santos, and but for fine weather we would never have reached port at all, we were so short-handed. Once we got out of the tropics we lost no more, though.' He thoughtfully expectorated into a spittoon at his feet, and I found it advisable to go on deck, whither he soon followed me.

Carlisle Bay, with its shipping, and the low hills of Barbadoes were fast disappearing behind us as the little tramp, with the strong trade-wind behind her, plunged ahead through the sparkling waves, blue tourmaline colour in their depths, shading off to the green of an aquamarine where their tops grew thin and transparent. Our bows were pointed straight towards the setting sun, and a black cloud of smoke poured from the funnel, showing that the engineer was firing up. He had dined with us, and I wondered what he felt like in the engine-room, and how a temperature of one hundred degrees or so would agree with that cream sauce.

'We will be off Castries about four o'clock tomorrow morning,' said the captain. 'I am not going to stop there. The harbour-master will take you ashore in his boat, but you will not find it easy to pass away the time till daylight. Your folks are all up on the Morne Fortunée, and you can't get up there in the dark. There is a sort of hotel in Castries where you might be able to knock somebody up, but I doubt it.'

'Oh, never mind,' said I; 'I can rough it. It will not be like Santos anyhow.'

'You're right there, sir. I've seen curious things happen in these waters too. I dare say, now, you have been on Pelican Island?'

'The quarantine station?' said I. 'Oh yes, I have seen it. Uninteresting little place it is, too,'

'Well now, I'll tell you a story about that, that I'll venture to say you have never heard before. It happened years ago, and I do not think there ever were many who knew the rights of it. Light your pipe if you like, sir. No! Well, maybe you're right. I should not feel I had had my dinner if I didn't get a smoke after it.

'There was a young fellow who came out to Barbadoes to take a post as manager in one of the firms that trade in Bridgetown. They promised him a good salary, for he belonged to their London house, and I suppose he was a smart business man. He knew he would have a lonely time of it out here, and he could well afford a wife, so he brought one out with him-a little English girl. I have heard from those who saw her that she was real fond of him and he of her, and they were wonderfully taken with the strangeness and the newness of everything they saw. You see, when one first comes out to the tropics one's health is good, and you have the cold climate's energy in you, and if you do not take an interest in things then-why, you never will.

'Now, about that time a barque had come in from Santos, forty-three days out, with a clean bill of health for the voyage, and so she had not been quarantined. When they began to unload the ballast to fill up with sugar, one of the men fell ill, and then another; so the captain took them up to the town hospital, and there they died of yellow fever, and were buried in a great hurry, and nothing said about it, for fear people should be frightened.

'The health officer went on board the barque, and he soon found what was the matter. The ballast was all Santos earth—full of fever no doubt. He had the hatches of the hold battened down and sealed, and then he telegraphed to the owners asking for power to hire a schooner and put the well men on board of her, whilst the barque was taken out to sea and the ballast jettisoned. But the owners sent word back that it was no business of theirs, and the colony might do what it liked; they had no money to waste in hiring schooners because a lot of sailors were afraid of yellow fever.

'By this time a lot of the men were ill, so the government bought a couple of marquees from the military and pitched them on Pelican Island—one for the sick men and one for the well ones; and they sent a doctor to live with them, and to see that no one left the island to carry the infection elsewhere.

'Now, the whole matter being kept very dark, as I said before, and this young man and his wife being only just landed, and their heads full

of each other and of the wonderful things around them, it is easy enough to see that they would searcely hear of what was going on; and one evening nothing would suit the pair but to hire a boat and go sailing in Carlisle Bay to get away from the mosquitoes on shore; for, as they were new-comers, the mosquitoes plagued them greatly, as I dare say they did you, sir, when you first came out.

Well, the silly couple started for their sail, and he took a revolver to shoot sharks with—though he might as well have taken a popgun—not to mention that there are no sharks in Carlisle Bay now; they are frightened of the

steamers.

'After they had sailed about for a while, as ill-luck would have it, the girl saw the white tents on Pelican Island, and nothing would do for her but to go and explore it, and see who was having a picnic there. And the poor young fellow knew no better than to take her at her word. He was London bred, and I don't suppose had ever heard of quarantine in his life.

'They tied their boat up to the pier, and the first the doctor knew of their being in the island was when he saw them standing inside the door of the marquee where he was helping the nigger attendant to lay out a seaman who had just died of the fever, whilst two other poor chaps who had an hour or so longer to live looked on.

Well, sir, you may imagine the doctor was angry. He jumped up and pushed them both out of the tent, and then he got hold of the young manager and shook him, and asked him what he meant by bringing a young woman fresh from home (as he could see by her colour) to that place; and did he know it meant certain death if she took the fever? and so on, and so on. And then he told them they could not leave the island now they had got on to it, and it was his bounden duty to keep them in it. And all the time the young man never answered a word, but got whiter and whiter. At last he cried out to his wife to run down to the boat and he would follow her. She did what she was told, sadly frightened no doubt, poor thing. The doctor called out his nigger from the tent, and was for running after her, but the manager whipped out his revolver and swore a great oath that he would shoot him if he did not stop. The nigger ran away, but the doctor was a good-plucked one. "I'll die doing my duty!" he said. With that the young man put the revolver back in his pocket, and ran at the doctor and knocked him down, and then rushed down to the boat, where his wife was, and jumped in. He cut the painter and hoisted the sail. But a lookout man on shore had seen their craft touch at the island, and by this time two white ten-oared boats were coming from Bridgetown as fast as the men could row, to see what was the matter. They were between him and the shore, and he couldn't doubt what their object was, as they altered their course to cut him off.

'Now, sir, I won't go into details; but a man dying of yellow fever is not a pleasant sight to look at, and I make no doubt that if I had been on board that boat myself, and knew that I and my wife were likely to be brought back to Pelican Island and left there, for months maybe, I would have done as the manager did—put up my helm, slacked off the sheet, and ran away. The tradewind was blowing strong, and he could easily outsail the oars. I suppose he thought, on that course, he was bound to make some of the islands, as they all lay to leeward.' The captain paused a while and looked over the stern at the foaming track of the screw. We were light in the water.

'Well,' asked I, 'what happened next?'

'I don't know, sir; I don't know. It is not every landsman who can steer a boat running before the trades with a following sea; perhaps she was pooped, or he may have let her broachto. Either way she would be pretty certain to fill and sink, and I hope that was what happened. Sometimes at night, when I am on deck, I think of those two poor things in an open boat, with no food or water, and no prospects before them, even if they got safe to land-for of course he could never go back to Barbadoes. He had his revolver, you see! Next day a gunboat came into Carlisle Bay, and she was sent to look for the lost craft, but she never found her. So the few who knew the rights of the story agreed to hush it up, and most people thought the boat had been blown out of the harbour, and so swamped. After all, there was no one to blame; but it was a sad pity—a sad pity!'

The short tropical twilight was changing rapidly to the darkness of night. The captain walked forward to see that the port and starboard lights were burning properly, and I went below to try to get some sleep before reaching Castries. I saw no more of him till I said good-bye as I stepped into the harbour-master's boat in the warm, velvety blackness of the early morning. As I shook hands I asked him how he happened

to know the story himself.

'I was the skipper of the barque,' he said

shortly. 'I was on Pelican Island.'

Half-an-hour later, as I was fighting the mosquitoes and trying vainly to get to sleep in a chair in the odorous bar-room of the Castries hotel, I remembered several other questions that I should have liked to ask him; but I never saw him again. The little tramp steamer was sunk whilst running the blockade at Cuba with a cargo of arms and ammunition for the insurgents. I have always felt that the captain did not tell me quite the whole of that story.

RIFLING SHIPS ON THE AUSTRALIAN COAST.



EVERAL times in each year Australian newspapers announce the departure to England or San Francisco of vessels carrying hundreds of thousands of pounds' value in gold. As much as three millions

sterling are sometimes carried away from the Australian coast in a few months. In 1896 the three colonies of Queensland, New South Wales, and Victoria sent away £8,889,000. It is not a matter of surprise that such announcements excite the cupidity of a section of the community, or that from time to time attempts are made to surreptitiously lay hands on some portion of the seductive treasure. A century ago the means employed for the exploiting of a ship's valuables differed greatly from those in vogue now. Then pirates attacked the vessel on the high seas, and a battle royal determined the issue, or some of the ship's own men or officers conspired and fought the others for the booty. At the present day there is none of this sensational bravery. Personal prowess of the demonstrative kind is never seen, and the smoke and noise of war are wholly absent. Robbing a ship's safe on the Australian coast is now conducted with the same silent and thoughtful deliberation as is the solving of a difficult chess problem. And the success which attends this new method exemplifies from an unexpected quarter the truth of the poet's high conceit:

In silence mighty things are wrought; Silently builded, thought on thought, Truth's temple greets the sky; And, like a citadel with towers, The soul, with her concentred powers, Is strengthened silently.

The poet had a different object in his mind's eye, but his canons of work exactly suit the needs of the modern ship-safe rifler.

The first thing the rifler sets his heart upon is how to get the key. It is singular what negligence ship officers often display in regard to the custody of their keys. The theory, and indeed the general practice, is that the captain checks the boxes as they are stored in the bullion-room, locks the door when the transaction is complete, and, sleeping and waking, carries the key in a leather pouch around his neck till he unlocks the door at the end of the voyage. But theory and practice are often set aside. In the Tararua case at Melbourne in 1880, when £5000 worth of gold bars were stolen, the police discovered that two keys, either of which opened the bullion-room, used to hang against the wall in the public bar. It was also discovered that one of these keys mysteriously disappeared twelve months before the robbery, and that no serious investigation was then made into the loss; nor was any alteration made in the lock of the bullion-room. This Tararua was a Union Company's boat, running between New Zealand and Australia, and had shipped boxes of gold at various ports. Altogether she was supposed to carry eleven boxes. On arriving at Melbourne it was found that one of these boxes, containing five bars, weighing 1255 oz. 12 dwt. 12 gr., and valued at over £5000, was missing. Examination showed that some one had simply opened the door with a key, extracted the box, and locked the door again. There was no clue as to when the deed was done. The fact that the twelve months' missing key had never been traced stood to the advantage of the criminal. The police record of the proceedings says: 'So many persons' had the opportunity to take this gold, owing to the carelessness of those who ought to have had charge of the keys of the gold-room, that we find it most difficult to fix suspicion more firmly upon one than another.'

The robbery from the *Iberia*, which left Melbourne for London in March 1889, is supposed to have been also effected by means of a key surreptitiously procured. In that case the purloined gold consisted of five thousand sovereigns, and the robbery was not discovered till the arrival of the vessel in London. The captain, second officer, and purser were called on to resign, not on account of suspicion resting on them, but because they could give no explanation of the robbery. The mystery was never fully cleared up, but events indicate that some of the sailors had a hand in the crime.

The robbery of £5000 in gold ingots from the Aredale at the Nelson Wharf, New Zealand, about 1865, was undoubtedly the outcome of mislaid keys.

Bullion is carried in solid bars or ingots, generally 8 inches by 3 inches by 1 inch, and each bar is valued at £800. It often happens, particularly along the coast of Australia, that the captain has to add to his consignments at port after port, and thus necessarily locks and unlocks the bullionroom door many times. When it is discovered at the London side that a robbery has taken place, the fact stated greatly extends the area of investigation. The surroundings on each occasion of locking and unlocking must be minutely examined. and all suspected persons carefully looked up and shadowed. Interested parties, or individuals with a taste for practical jokes, increase the difficulties of elucidation by showering the police with anonymous revelations as to the whereabouts of the missing treasure. At a critical stage of the Tararua investigations the detectives received a letter running thus: '. . . Bars. Search butcher's shop, — Street, Melbourne; also dwelling-house for a prospect. Night.' The butcher's shop and dwelling-house were duly raided at night, but no

gold bars were forthcoming. Another anonymous letter ran: 'What about — and a certain cabman? They know something of the *Tararva* gold,' Here again the clue ended in nothing. Detectives wisely give a certain amount of attention to anonymous letters; but there is no doubt that such letters are often written to throw justice off the scent.

The robbery from the China developed in a remarkable way. Here the Oriental Bank in Sydney placed the gold on board a coastal steamer called the Avoca. At Melbourne the gold was transhipped to the China. The China touched at Adelaide and other ports, but it was only at Galle the discovery of the robbery was made. Detectives operated on all the ports simultaneously, but nowhere could a clue be found. The amount missing was the usual £5000. The P. & O. Company, to whom the China belonged, dismissed various officers, and after a time the subject dropped out of public talk. In 1878, however, a man named Weiberg, who had been carpenter on the China, took up a selection in the interior of Victoria. Before settling down he married a Melbourne barmaid, and appears to have confided to her some shady particulars of his past history. The Samson and Delilah story was in part repeated, and the public laid themselves out to watch Weiberg. The upshot was the arrest of the man as the safe-rifler of the China. In his effects lay ready proof of his guilt. One thousand sovereigns were found in a tin of fat stored away by him in Melbourne. In his hut was discovered a wooden plane stuffed with gold; the wood was hollowed out and the gold dropped in. In the hut was also discovered a bar of soap containing two hundred sovereigns. A policeman happened to lift the soap, when its great weight arrested his attention. With an auger the soap had been drawn out and the sovereigns inserted in its stead. Weiberg was a man of resource who declined to accept defeat. He told the detectives that he had eighteen hundred sovereigns concealed on his selection, and offered, if they accompanied him, to point out the spot where the booty lay. As may be surmised, he fooled the police into a wild, thicktimbered region, took them suddenly off guard, and made his escape. He was recaptured, however, some months later, and after doing a term of hard labour was accidentally drowned in a Gippsland lake.

The mystery of the *Iberia* £5000 was cleared up in a still more singular manner. Every attempt to trace the lost money failed, and the authorities ceased to think about it. One day two boys playing at Williamstown saw a mouse run into a hole under the platform of the railway pier. One of the boys started to dig the mouse out with a stick, and, to his surprise, unearthed a mass of sovereigns. The boys gathered up between them two hundred and eighty-two

sovereigns, and hurried home to report their luck. The police were informed, and before the day was out three thousand seven hundred and forty-two sovereigns were recovered. This still left a balance, but neither balance nor robber has since turned up.

The recovery of the Aredale gold was more satisfactory, as far as amount is concerned. This robbery was, as has been said, effected by some one who made use of unguarded keys. It took place in the early sixties, and covered the usual £5000, but in bars. For nearly two years the police laboured in vain. The mystery might never have been cleared up but for an accident. A wharf-lumper fishing at Nelson Pier, where the Aredale had been berthed, hooked on to something which excited his curiosity. Obtaining assistance, the lumper succeeded in bringing to the surface the missing box with its treasure intact. The robber had evidently sunk the box, intending to return for it when opportunity permitted.

Less than a year ago the Oceana lost £5000 at or near Melbourne, but investigation has so far failed to unravel the mystery.

HOME SICK.

Write to me very often,
And I greatly long to hear;
For alien hearts are round me,
And alien faces near.

Write when the sun is sinking,
And the firelight flecks the gloom,
And the mist dims all the window,
And the shadows shroud the room.

Write when the songs that we sang
From other voices come,
When the old, old strains awaken
The thoughts that have long been dumb.

Write to me very often;
For, in times of thoughtful pain.
I dream that I do what we did
Over and over again.

Write from the cheerless city
In autumn's evening-damps,
When the splashing pavements glimmer
With the rain-bespattered lamps.

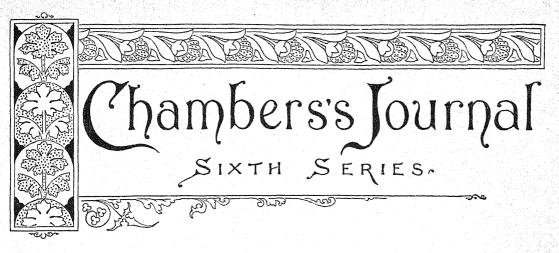
Write from the happy country,
With its grass-grown hills and sun,
Where under the moss-hung boulders
The musical rivulets run.

Write to me very often,

For I often think of you;

And the life I lead is lonely,

And the friends I find are few.



CAPITAL PUNISHMENT.

By MAJOR-GENERAL SIR EDMUND F. DU CANE, K.C.B.



BRIGHT Pennsylvanian youth, being required on his examination to set forth the advantages secured to every citizen by the constitution of the United States, included among them 'death by hanging.' If he

meant that this institution was retained as a protection against murder and violence, he was not so wrong as might appear at first sight. There are those among us who desire to put an end to capital punishment for various abstract reasons; but they never meet the objection that it is necessary to retain this punishment in order that those who are tempted to commit murder may be deterred by the fear of what may happen to themselves. It is not often that direct evidence of this deterring effect can be obtained; but sometimes chance furnishes the desired proof-as in the following instance. When West Australia, now the great goldfield, was made a convict colony, a local law was passed by which a convict committing a murderous assault on a warder became liable to the penalty of death. A turbulent convict who had been transported to the colony managed to find means of surreptitiously communicating with a friend in England. He therefore sent him a letter which did not, as usual, pass through the hands of the prison authorities. When the letter arrived in England the friend had disappeared and left no address. After lying some time in the Dead-Letter Office, it was returned to the writer through the prison authorities in West Australia, and therefore became open to their inspection. He had in it informed his friend of various points in the new sphere he was moving in, and among other things he mentioned the law above referred to, and made the following comment on it in the lingo of his fraternity: 'They tops' (that is, hang) 'a cove out here for slogging a bloke' (that is, assaulting a warder). 'That bit of rope, dear Jack, is a great check on a man's temper.'

On the whole, there is no more just answer to No. 12.—Vol. I. [All Righ

any proposal for doing away with the deathpenalty than that of the witty Frenchman: 'Que Messieurs les assassins commencent.' In order to prevent the painful scenes which have sometimes taken place when an execution is bungled, which lose nothing in their sensational aspect in the notices transmitted to the press, an inquiry was some time ago instituted with a view to establishing a mode of action which should as far as possible prevent any such mishaps. The extinction of life effected by hanging may be brought about either by the constriction of the airpassages, which produces suffocation, or by that of the veins and arteries, producing apoplexy, or by breaking the neck, thus severing the spinal cord. The most instantaneous and least painful of these is the last, and it was determined that the arrangements should be such as to effect that object. In former times the criminal was either pulled up a certain height from the ground (in this method the French used their 'lanternes' as gibbets in the Revolution), or else the cart he stood in was drawn away from under him and he was left hanging. By these methods the length of drop was very short, and death ensued from one of the first two of the above causes. The breaking of the neck is effected by giving a long drop; and Marwood, the late hangman, used to talk of Calcraft, his predecessor, as a 'short-drop man' as one might speak of a rival school of art.

At the time of the Indian Mutiny a considerable amount of rough-and-ready justice was dealt out to the mutineers caught red-handed. A sergeant of one of the flying columns accepted the office of executioner, and, having had no previous experience, was thought to have sometimes given to the patients who came under his hands pain which might have been avoided. His commanding officer summoned him to reply to this charge, and his plea in rebuttal was: 'Please, sir, I han't had no complaints.'

In order to settle scientifically the length of answer to drop which should effect the object without [All Rights Reserved.] Feb. 19, 1898.

running the risk of mutilating the body by stretching the muscles of the neck to the point of rupture, a learned professor in Dublin, recently deceased, devoted some time to investigating the subject, and evolved a mathematical rule which made the length of drop inversely proportionate to the weight of the patient. Some modification of this is the rule now adopted. A special kind of rope has been manufactured which is very strong and pliant, and stretches very little, so that none of the shock of the descent of the body is absorbed in stretching the rope; and the above rule obviously gives the longest drop for the lightest body, so as to produce the right momentum, and vice versa.

There is no lack of competitors for the office of executioner when the operation has to be performed in England, but in Ireland there is a great prejudice against undertaking it; and there have been difficulties sometimes in the Colonies in finding an operator. Marwood used to say he never experienced any unpopularity in England, and accounted for Calcraft being sometimes badly received by saying that 'Mr Calcraft never made himself agreeable.' Going to Wales on one occasion to fulfil his office in the case of a foreigner who had committed several brutal murders, he found himself quite popular, and was received at the station when about to depart with a sort of ovation, to which he responded affably, saying he hoped he might 'before long have occasion to visit them again.' On the other hand, on coming back from Cork, where he had been to carry out the duties of his profession because no native could be found to do the job, he had rather a rough experience; for on board the steamer he overheard a conversation between two Irishmen, one of whom related that he heard the hangman was on board; to which the other replied that if he could find him he would throw him overboard during the night. Marwood on this thought it well to retire to his bed in a dark corner, and did not make his appearance any more until the steamer was well in the dock in England.

On one occasion, at the Cape of Good Hope, a Frenchman offered himself to fulfil the function of hangman. With the national love of effect, he posed as a high public official fulfilling a noble and important function. Dressed in evening costume, with white tie and white gloves, he presented himself on the scaffold, and went through his duties in a most imposing manner; after which, conscious that the bystanders might wish to possess a relic of so great a man and such an occasion, he drew off his gloves, folded them into a neat little ball, and threw them to be scrambled for by his admirers. Sometimes in England the hangman has lent himself to sensational effects by exhibiting himself and his implements in a town where he has been employed, but this is sternly repressed by the authorities.

The demeanour of persons who are destined

to be hanged varies much. Most of them, happily, are conscious of their crime and the justice of their sentence, and die penitent-the old bravado which was the result of the public system of execution is not now so common-but complete indifference is sometimes exhibited. Dr Pritchard, the Glasgow murderer, on his way to the gallows apparently had no thoughts of his own position, but, addressing the medical officer, said, 'It's a very cold morning, doctor; oughtn't you to put on your coat?' Wainwright, the ex-Scripture reader, was obscene and blasphemous almost to the last. When the eight Flowery Land pirates were brought up for execution, and at the last moment a reprieve arrived for one of them, his immediate thought was, 'Then I can have Francesco's shoes.' The notorious Peace was very business-like. It was said that he and Marwood the hangman had met before in the train and become acquainted with each other's line of life. When they met again on the scaffold at Leeds, and Marwood had put the rope round Peace's neck and was running up the washer to keep it in its place, Peace observed, 'Ain't you a-pulling of it rather tight, Mr Marwood?' 'Oh no, was the cheerful reply; 'I won't hurt you.'

It is part of the duty of the high sheriff to carry out an execution. He generally acts through an under-sheriff, who sees to all the arrangements, which practically are carried out by prison officers, who for those purposes are under the orders of the sheriff. He appoints the hangman; and it was one of the recommendations of the committee which was appointed to consider all the details of an execution, that an assistant should always be appointed in order that some other person or persons might have experience on the subject in case of need. No spectators are admitted to see an execution except by order of the sheriff, and it is now very common to admit no members of the press, and thus a very unsavoury kind of sensational writing is avoided. In England a coroner's inquest is always held on the body, and this completely satisfies any legitimate public interest in the matter.

In former days when any sentence of death was passed within the jurisdiction of the Central Criminal Court it was the duty of the Recorder to submit the names and offences to the king in council, and it was then decided whether or no the sentence passed in conformity with the law should take effect. Sir Nathaniel Wraxall relates that when Dr Dodd was sentenced to death the king had the strongest desire to save him, and that Lord Sackville had informed him that to the firmness of the Lord Chief-justice, Dodd's execution was due, for no sooner had he pronounced his decided opinion that no mercy ought to be extended than the king, taking up his pen, signed the death-warrant.' After he was hanged his body was conveyed to a house in the city of London, and underwent every scientific professional operation which it was hoped might restore animation. Pott, the celebrated surgeon, was present to direct them.

It is doubtful whether there ever was actually, as is commonly believed, a death-warrant signed by the king—the sentence of the judge is the authority and direction to the sheriff; only the sentences of the Central Criminal Court were systematically brought before the king, and then his action was only to reprieve or pardon.

When the Queen ascended the throne one of the first acts passed was to relieve her Majesty of this duty, for it is dated 17th July 1837, and she succeeded on 20th June. It purports to be to assimilate the practice of the Central Criminal Court to that of other courts in England, and directs that the judge shall order the time and place of execution, not being more than twenty-one days nor less than seven from the date of the order.

A curious survival of old laws unnoticed for some years occurred in connection with this subject. The Isle of Man makes its own laws through a 'Court of Tynwald.' One of these laws passed in 1817 requires that the king shall issue his warrant for an execution to the Lieutenant-governor. In 1872 a wretched man had a quarrel about some small property with his father, aged seventy, in which he was supported by his mother. After going to law they compromised the matter, and the father was to receive a cow from the son. Shortly before the time for handing over the cow, the son went to his father's cottage and killed him with a pitchfork. He

was sentenced to be hanged; and in conformity with the law her Majesty was called in to approve the sentence, which, under advice of the Home Secretary, she did, though with a great strain on her feelings. The Mutiny Act required that all sentences of a general court-martial should be submitted by the judge advocate - general to be confirmed by the Queen, and this might have brought about the submission of death sentence; but the present Army Act enables that duty to be delegated.

The number of executions during the present reign has been much smaller than formerly. Coke, in the time of Queen Elizabeth, remarks on the large number of persons hanged. In 1750 a great increase of crime occurred, and in the following year sixty-three persons were hanged in the small London of those days. But many more were sentenced than were actually hanged. In England in 1785 there were 242 sentenced, and 103 actually suffered. Townsend, the Bow Street runner, said that between 1781 and 1787 he had seen as many as twelve, sixteen, or twenty hanged at one execution. Twice he had seen forty hanged at one time. In the fifty-eight years ending 1894 there were 736 executions in England and Wales, or between twelve and thirteen per annum. In the first ten years there were 100, in the last ten 164-which, though actually more, is, in proportion to the population, less than in the first ten, as the population doubled between 1837 and 1894, The largest number in any one of these years was in 1877, when there were twenty-three; and the smallest in 1871, when there were four.

JOHN BURNET OF BARNS.

CHAPTER XIV .- THE FIRST SUNDAY OF MARCH.



SLEPT late on the next morning, so that it was near nine o'clock ere I was up and dressed. By the time that I broke my fast I had had some leisure to reflect upon the events of the preceding

night and the consequences which should ensue. Nicol came to me as soon as the meal was over, and together we sat down to consult.

'This is the Sabbath, your honour,' said Nicol, 'so you may consider yoursel' free for the day at ony rate.'

'Not so free,' said I, for I knew my cousin Gilbert; 'the men I've to deal with have little respect for the Lord's Day.'

'Weel, weel,' says Nicol, 'if that's sae, it mann be sae. Will ye gang oot wi' him the day?'

'No,' said I. 'Not that I am caring for the day, for you mind the proverb, "The better the day the better the work;" but, being in a foreign land, I am loth to break with the customs of my country. So we'll keep the Sabbath, Nicol, my lad, and let Gilbert whistle.'

Now I would not have him who may read this narrative think from my conduct on this occasion that I was whiggishly inclined, for indeed I cared nought about such little matters. I would have a man use the Sabbath like any other day, saving that, as it seems to me, it is a day which may profitably be used for serious reading and meditation.

'Weel, Laird, that means ye'll no see the body though he comes,' said Nicol, 'and, God help me! if ye dae that there'll be a terrible stramash at the street-door. I'se warrant auld Mistress Vanderdecker'll get her ribs knockit in if she tries to keep them oot.'

'They can make all the noise they please,' said I hotly; 'but if it comes to that, the two of us are as good as their bit officers. I ask for nothing better than to take some of the pride out of Gilbert's friends with the flat of my sword. Then, if they come to-day and are refused entrance, they will come back to-morrow, and all will be well.'

'Then what am I to dae? When the bodies

come to the door I'm to say, "His lordship's compliments; but his lordship's busy keeping the Sabbath in his upper chamber, and if ye will come back the morn he'll look into your claims."

'You'll say to them that I am busy with other work, and that I will be glad to see them to-morrow about the matter they know of. Most likely they will go away quietly; and if they do not it will be the worse for their own skins. You take my meaning?'

'I'll dae your orders, sir, to the letter,' said Nicol; and I was well aware that he would.

I got my books out and set to work to read the Gospel of John in Greek for my spiritual benefit, but I made little speed. This was mainly the fault of Nicol, who every few minutes came into the little room where I sat, on some feigned errand. I soon divined the reason, for the same chamber contained a great window, whence one might view the whole length of the narrow street wherein the house was situate, and even some little portion of the great Breedestraat at the head. It was plain that my servant was not a little concerned on my account.

'Are you sure that your honour's guid wi' the small-sword?' he asked mournfully. 'If this room were a wee bit braider and the day no

what it is I micht gie ve a lesson.'

I did not know whether to laugh or to be angry. 'Why, you rascal,' I cried, 'do you know anything of these matters? There are many better swordsmen than I in the world, but I think I am more than a match for you.'

'Weel,' said Nicol modestly, 'I've gi'en some folk a gey fricht wi' the swird; but let that be. I'll be blithe if ye get the better o' him, and a waefu' man I'll be if he kills ye. Lord, what'll I dae? I'll hae to become a sodger in this heathen land, or soom hame, whilk is a thing I am no capable o'.' And he began to sing with a great affectation of grief:

'The craw killed the pussie, O, The craw killed the pussie, O, The wee bit kitlin' sat and grat In Jeanie's wee bit hoosie, O.

In which elegant rhyme the reader will observe that my cousin stood for the crow, I for the pussie, and my servant for the kitlin'.

I laughed; but it was not seemly to stand by while your own servant sings a song which compares you to a cat, so I straightway flung a Greek lexicon at his head and bade him leave the room. I much regretted the act, for it was my only copy of the book, Master Struybrock's, and the best obtainable, and by the fall some leaves came out; and one—πολυπενθής to πολύπους—has not been renewed to this day.

After Nicol had gone I amused myself by looking out of the window and watching the passers-by.

I had not sat long when I noted two gentlemen coming down the alley from the Breedestraat, very finely clad, and with a great air of distinction in their faces. They kept the causeway in such a fashion that all whom they met had to get into the middle of the road to let them pass. I half-guessed their errand, the more as the face of one of them seemed to me familiar, and I fancied that he had been one of the guests at the supper at Alphen. My guess was confirmed by their coming to a halt outside the door of my lodging and attentively considering the house. Meantime all their actions were plain to my view from the upper window.

Now, I had bidden Nicol be ready to open to them and give my message. So I was not surprised when I heard the street-door opened and the voice of my servant accosting the man.

I know not what he said to them, but soon words grew high, and I could see the other come forward to his comrade's side. By-and-by the door was slammed violently, and my servant came tearing upstairs. His face was flushed in wrath.

'O' a' the insolent scoondrels I ever met, that twae are the foremost. They wadna believe me when I telled them ye were busy. "Busy at what?" says the yin. "What's your concern?" says I. "If ye dinna let us up to see your maister in half a twinkling," says the ither, "by God! we'll make ye." "Make me," says I. "Come on and try it."

'Nicol,' I said, 'bring these men up. It will be better to see them.'

'I was thinkin' sae, your honour,' says Nicol, 'but I didna like to say it.'

So in a little the two gentlemen came up the stairs and into my room, where I waited to receive them.

'Gentlemen,' said I, 'I believe you have some matter to speak of with me.'

'Why do you keep such scoundrelly servants, Master Burnet?' says one, whom I knew for Sir James Erskine of Tullo.

'Your business, gentlemen,' I said, seeking to have done with them. They were slight men, whom I could have dropped out of the window, most unlike the kind of friends I should have thought my cousin Gilbert would have chosen.

'Well, if you will have our business,' said the elder, speaking sulkily, 'you are already aware of the unparalleled insult to which a gentleman of our regiment was subjected at your hands?'

'Oh yes,' I said gaily; 'I had forgotten. I broke Gilbert's head with a wine-glass. Does he want to ask my pardon?'

'You seem to take the matter easily, sir,' said one severely. 'Let me tell you that Master Gilbert Burnet demands that you meet him at once and give satisfaction with your sword.'

'Right,' I cried, 'I am willing. At what hour shall it be? Shall we say seven o'clock to-morrow morning? That is settled then? I have no second, and desire none. There is the length of my sword. And now, gentlemen, I have the

honour to wish you a very good day, and I bowed them out of the room.

They were obviously surprised and angered by my careless reception of their message and themselves. With faces as flushed as a cock's-comb they went downstairs and into the street, and I marked that they never once looked back, but marched straight on with their heads in the air.

'Ye've gi'en that lads a flea in their lug,' said Nicol. 'I wish ye may gie your cousin twate inches o' steel in his vitals the morn.'

The rest of that day I spent in walking by myself in the meadows beyond the college gardens, turning over many things in my mind. As for the fight on the morrow, I did not know whether to await it with joy or shrinking. As I have said already, I longed to bring matters between the two of us to a head. There was much about him that I liked; he had many commendable virtues; and especially he belonged to my own house. But it seemed decreed that he should ever come across my path, and already there was more than one score laid up against

him in my heart. I felt a strange foreboding of the man, as if he were my antithesis, which certain monkish philosophers believed to accompany every one in the world.

If I conquered him, the upshot would be clear enough. He could not remain longer in Leyden. His reputation, which was a great one, would be gone, and he would doubtless change into some other regiment and retire from the land. If, again, he had the advantage of me, I had no reputation to lose, so I might remain where I pleased. So he fought with something of a disadvantage. It was possible that one or other might be killed, but I much doubted it, for we were both too practised swordsmen to butcher like common cutthroats. Nevertheless I felt not a little uneasy, with a sort of restlessness to see the issue of it all-not fear, for though I had been afraid many times in my life, it was never because of meeting a man in fair combat.

Toward evening I returned to my lodging, and devoted the remainder of the day to the study of the books of Joshua and Judges for the comforting of my soul.

THE MINERAL RICHES OF CHINA.



has long been known that the mineral resources of the Chinese Empire were extensive, and not a few good people, aware of the material advantages which follow the development of such resources, but imper-

feetly acquainted with the Celestial character, have expressed astonishment that the government should never have decided to work them to their full capacity. Not that they have at any time remained entirely neglected in the ground; the gold and silver deposits in some of the various provinces have been worked by or under the supervision of the authorities. Iron manufacture is also carried on in many parts of the empire, and coal is mined in innumerable districts. But virtually the mineral riches of the vast, unwieldy country have remained undeveloped. The precious metals excepted, such minerals as are produced at all are for the most part produced only for local requirements, whereas if their winning were organised on a real commercial footing, the result would be to alter the attitude of China to the rest of the world in an almost revolutionary manner. This will perhaps be regarded as an extreme statement, but it is none the less true.

The main obstacles which have hitherto prevented any material progress in the development of China's mineral wealth are the apathy of the central government, which has never been solicitous for the welfare of the country so long as it has received the full sum of taxes demanded from each province; the rottenness of the provincial governments and the

blackmailing habits of the mandarins and other officials; the want of rapid and economical means of transit, and the lack of efficient machinery and intelligent supervision. In effect, whatever may be the case in theory, there is no well-defined system of land tenure-everything rests with the official classes; and so far from affording encouragement to prospectors, these classes have done the reverse by the arbitrary imposition or increase of excessive royalties to swell their own individual perquisites, superadded to enhanced transit dues on such products as are sent by river or overland to any considerable distance. The provision of railways, of which we have heard much talk recently, and of steamers on some of the principal rivers contiguous to the deposits, would go a long way towards removing the present obstructions; but every one who has made personal acquaintance with the ways of the provincial governor-generals and their subordinates will agree with me that any complete exploitation of the country's wealth is impossible until the reformation of its fiscal system. For instance, the maritime provinces of Pechili and Shantung, and the provinces of Hunan and Shansi, bordering upon them in the interior, contain stores of coal and iron, which, if they could be brought to the seaboard at a reasonably low cost of carriage, would drive all other coals—British, Indian, Australian, and Japanese—right out of the Eastern seas. But under existing conditions this cannot be done, and at present no more than a few thousand tons ever reach the treaty-ports in the course of a year.

Though one despairs of a complete exploitation, it is interesting to note that China has lately given indications of a recognition of the value to itself of its unworked minerals, metalliferous and non-metalliferous. It has sanctioned the grant to an English syndicate of a large tract of goldbearing land in Manchuria; and in Hunan it has established a Bureau of Mines for the purpose of promoting and controlling the output of coal, iron, copper, tin, &c. In themselves these two concessions are of little account. But they are valuable in that they display a changed attitude on the part of the authorities, and therefore they are an encouraging augury for the future. If one searches for an explanation of the change, it will probably be found in the lesson taught to China by the war with Japan (not to speak of the intervention of Russia and Germany in Chinese affairs)—that Western methods count for more than the Celestials were before disposed to admit; and that future development must be made on lines at least suggested by Western methods, together with all that such a divergence implies. Save for the gold concession granted to the English syndicate, the mining of this metal, as well as of silver, remains for the present in the hands of the government. As to the richness of the land in gold, not much is really known, because of the absence of any systematic survey of those parts in which it is found, and the absence of any authentic data bearing upon the annual production. On the other hand, there are many known districts in which it is mined, and the quantity brought into the various gold markets of the interior and into the capital, where it is hoarded or converted into ornaments, is very considerable. The mountains that rise to the north of Pekin and stretch right to the Amoor are regularly worked for quartz and gravel gold, and some of them are so rich as to have earned for themselves the title of 'gold mountains.' In the south-western provinces of Szechuan and Yunnan there are more government mines. The river Kinsha, which rises in Tibet and ultimately becomes the Yang-tse-kiang, is known as the 'river of gold,' and its banks are regularly washed by the aid of primitive appliances which involve the loss of fully 75 per cent. of the gold that passes through them. Go into any province you choose—if the mandarins will allow you—and the people will tell you of places where they have found gold casually, or where it is worked for the benefit of the imperial owners and their Tartar satellites.

There are mines now at work only a few miles inland from Chefoo; and in the province of Shantung, of which it is the capital, there are other gravel-gold deposits at Kin-shan-sze, Moshan, the Saw Teeth Mountains near Tantzuen, Tsi-hai-hien, Lai-Yang, and Kow-tew. There is not the same secrecy about the silver-mines of the empire, though they too, like the gold-mines, are worked either by the officials or under official supervision. Silver is, in fact, a form of money, and though it passes current in the form of syces or shoe-blocks, mints for

its proper coinage have recently been established—another evidence of progress. Some of the principal mines are in Yunnan.

In Pechili it is worked near Ching-shui; at Mount Tsu, 45 miles west of Lu-ling-hien, in conjunction with gold and iron; at Mount Yin-ven. north-east of Pekin; Si-lin, and Yuh-wang. In Shansi there are mines at a place called King-saupu, at Ngan-i-hien, and in the south near Ping-lohhien; in Shensi at Mount Tsungnan (in company with iron and jade stone); at Mount Tu, 21 miles from Shangchow; at Mount Szeni; in Kansu-Pingliang-hien (with copper), and also in Wha-ting-hien in the department of Pingliangfoo; and at Mount Ning-kwei, 9 miles south of Ning-yuen. It would be possible to enumerate other provinces which contribute to the annual total, but these are the chief. What the annual total is cannot be even approximately stated, because of the numerous contributions and the carelessness of the central government as to statistical records; but we are justified, on the basis of the vast quantity in circulation, in assuming it to be very large.

The researches of Baron Richthofen, Pumpelly, and other geologists to whom facilities for investigation have been accorded, show that up and down the great disjointed empire are mines of tin, antimony, quicksilver, &c .- of course, in addition to copper, which is used for the staple currency of the country, and which has therefore been fairly well exploited, though there are many districts yielding this metal which have hitherto remained quite untouched. But in nothing is the country so rich as in coal and iron. The most conservative of the many estimates of the extent of its coal deposits puts the area at 400,000 square miles-which means that if all other sources of supply of this fuel were suddenly to fail, China would be in a position to meet the world's requirements, at the present rate of consumption, for some thousands of years.

We speak proudly of the coal-measures of Great Britain, to which in large measure we owe our unrivalled position as the world's workshop. But the coalfields of Great Britain are only 12,000 miles in extent. And it must not be supposed that all Chinese coal, or even a moiety of it, is of inferior quality, like the Indian and Japanese articles. The average grade of the bituminous coal of Hunan is quite as high as anything England can show; the anthracite of Shansi is equal to the best Pennsylvanian. These two provinces are the richest in coal. and in Shansi iron ore of a uniformly high grade is found in conjunction with or in close proximity to the coal. Other provinces are also favoured in this dual direction. Shantung, for example, has four coalfields of considerable extent, in addition to several minor ones. Black oxide of iron is so plentiful in the district twenty miles south of Tung-chow-foo that I have seen it breaking through in all directions. In other parts other varieties of iron ore have also been located. They are all conveniently situated for ready communication with

the sea if only the necessary means of transport were furnished. But the riches of Shantung are inconsiderable by comparison with those of the other two provinces.

Hunan has coalfields extending through two degrees of longitude and two degrees of latitude, and comprising over 21,000 square miles. There are two main beds-one of the anthracite, stretching along by the Lui river, and another of bituminous, stretching along the Siang river. Lui river coal is of uniformly high quality. The methods of mining it are primitive and involve great waste. Until the establishment of the Bureau of Mines there existed only the very vaguest notions of ownership. Any man was at liberty to work the deposits in a large way provided he was able to secure the consent of the provincial governor (which involved a liberal distribution of what is vulgarly known as 'palm oil'); and any native of the country round was at liberty to take from the ground as much as he required for his personal wants. This absence of proper appreciation of the value of the deposits has led to the opening of many shafts, which have invariably been abandoned before the extraction of one-tenth of the coal in them.

Both the Lui and the Siang rivers run into the Yang-tse-kiang, which traverses the province; and by means of this waterway Lui anthracite reaches Hankow, where it can be laid down at about three taels (say 10s.) per ton, of which one tael and a half represents cost of carriage. At present the coal is sent along the river in boats, and the cost on the way is swelled by transit dues. If these were abolished, and if deep mining were inaugurated with the aid of European machinery, and if, moreover, cheap steam freights were established on the great river. millions of tons of Hunan coal could be brought down to Shanghai at prices which no competitor could touch. It occurs in conjunction with iron ore of great purity; so that, under proper encouragement, a considerable manufacturing industry might be established in this rich and populous province.

Between Hunan and Shansi lie the mines of Lushan and Juchau, Honan-foo, Taihong-shan, and other districts of Hunan, which stretches from the Yang-tse-kiang to the Hoang-ho. This last river forms the southern boundary of Shansi, which has 630,000,000,000 tons of the best anthracite waiting

to be tapped. The coal-measures of this province are found on a plateau between 2000 and 3000 feet above the sea at its south-eastern extremity, and the main bed covers over 14,000 square miles. The average width of the seams is nearly 20 feet; the stratification is regular; and on all the edges of the terrace land, especially on the eastern side, the seams crop out, through the nature of the superficial configuration. A great advantage of this region is, that the eastern margin is on the slope of the plateau leading down to the Great Plain, which is intersected by navigable rivers, and capable of being cheaply provided with railways, and which is, further, capable of affording an untold store of the cheapest labour in the world.

The crowning merit of the Shansi coalfields is that, as in Hunan, iron is found abundantly in several strata of the coal-formation. The natives use only one kind of this ore—a kind that melts readily without the aid of any flux. A fairly large iron manufacturing industry is already carried on, and in spite of the crude methods of preparation, the product is of high quality—by reason mainly of the superiority of the raw material.

Just try to imagine for one moment the completeness of the revolution that would be effected by the introduction of Western works, equipped with Western machinery and appliances, into the heart of the great mineral-producing district of Shansi! Exercise your imagination a little more, and try to realise the change that would come over China, in its internal and external conditions and relations, if the government were suddenly to resolve upon an organised and determined endeavour to develop all the resources of the country, and were to carry out its resolve by the removal of all disabilities now existing, in the shape of vexatious internal taxes and jealous dislike of innovations, by the grant of direct mining licenses on reasonable royalties, and by the provision of rapid and cheap means of communication! Such a social revolution as this is a dream of the distant future, but it seems destined to be realised. Meanwhile a start has been made, and if the progress should prove to be slow, let it be remembered that, apart from its troubles from without at present, the government, under the peculiar fiscal system that prevails, is very poor.

LINDA.

CHAPTER III.—1896.



OOK yer,' Twilight Ben urged persuasively; 'you're a tenderfoot, and I calkerlate you ain't got accustomed to the climate yit. I seen this yer run of ill-luck kinder souring on yer fur some

time, and I do allow that I don't jest hanker arter working on a grub stake myself; but,

durn my skin, I did think you hed more grit in yer hide thin to cave in jest becos you don't git a straight flush fust deal! Blame it, man, hump yerself!—toot yer horn!—Hail, Columby!—and we'll strike it rich yit!'

Thus, with his forcible eloquence, did the old rascal seek to turn his younger companion from his expressed purpose, for he doggedly

stuck to his belief that the luck was bound to change sooner or later; and as Jim had shown he wasn't no slouch at shovelling-in the paydirt, Ben viewed with distinct disfavour any proposal that threatened to interfere with his cold-blooded and murderous design of doing half the work and securing, by fair play or foul, the whole of the profits. Yet all his rude oratory

availed him nothing.

'It ain't no use, observed Jim wearily, when the one-sided conversation had gone on until after midnight. 'I dunno what it is, but there's a dead weight dragging me down. I've fit agen it until I can't fight no longer, and I've jest got to git back to Oloville right away. I guess I'll jest drop down to Fort Cudahy and see when they expect one of the Alaska Company's steamers up. You'll recollec' thet Cracker Harry said there was one expected soon.' And he made his preparations for his dreary ten mile expedition.

'Wall,' returned Twilight Ben, with the air of one who has exhausted all his arguments and accepted defeat in the discussion, 'I calkerlate I'll take another turn at the cradle fur a spell; and by-m-by, ef so be ez you air minded to streak it back yer ez soon's you git the information, mebbe I'll meander down the trail

to meet yer and git the latest news.'

So Jim started out for the fort alone; but Twilight Ben, left to himself, betrayed no special anxiety to get to work, and the cradle knew not the touch of his hand that day. Instead, he sat in the hut, smoking and thinking, for an hour.

"Pears thar ain't no way of gitting the bulge on the young galoot with chin-music. I calkerlate I'll hev to play a trump keerd,' he soliloquised

as he rose from his meditations.

Later in the day he started off down the creek, and half-way between their claim and the fort he met the returning Jim.

"Wall?" he inquired sharply.

'They say there's purty sure to be a steamer up early next week. So I guess I'll jest git my things together and tote em down to the fort and wait fur her.'

'Pard, I rather tuk to you becos I thought you was grit,' Ben went on solemnly; 'and I'm disapp'inted. Still, you're white, and I like you, and ef you will throw up yer hand becos the keerds is agen us—wall, it ain't no funeral of mine, though it gravels me pesky hard to part with you; and ez I'm going to hang on to this yer game myself till I strike a streak or I'm wall-broke, I calkerlate I'll pay you outer my share of the dust fur what grub thar is left.'

*Now I call thet real kind,' Jim returned gratefully; and during the rest of the way back to the claim their time was occupied in making mutual arrangements with regard to squaring up

accounts.

*Gosh!' ejaculated Twilight Ben, with a start,

as they came in sight of their cabin; 'I could ha'sworn I'd shet and locked thet hut-door afore I quit. Ef thar's been any ornery, durned, lopeared greasers browsing round after the dust, by thunder, I'll shoot'em on the fly ef I git on their tracks!'

With this savage threat he hastened forward, closely followed by Jim. At first, when they had commenced to work their claim, such a crime as the old miner suggested would barely have been possible, for other claims were being worked contiguous to their own; or if even an attempt had been made, it would have been almost certain to have been instantly detected, and the culprit, probably, promptly lynched; not from any fine sentimental sense of justice (which is an extremely rare exotic in mining camps), but from the pretty unanimous instinct not to allow a mere trifle like sending a sin-logged soul, unrepentant, to his Maker off-hand to interfere with the individual desire of each man to secure as far as possible the safety of his own treasure. Now, however, since the rush to the Sixty Mile had practically emptied the creek of its restless population, bluffs hid the claim from its nearest neighbours above and below, and thus gave any thievishly-inclined party who might find the hut temporarily unoccupied the opportunity to attempt a little enterprise with reasonable hopes of im-

As the two reached the hut a glance was sufficient to show them that the lock had been smashed and the door burst in by force. Just inside the threshold they stopped. The interior of the hut was a den of confusion. Here and there the floor had been scored and pitted with the pick of the marauder in his unholy prospecting.

'Look!' exclaimed Twilight Ben hoarsely, point-

ing to the farthest corner,

But Jim Vickerson had already looked. A few shovelfuls of loose earth lay piled upon the floor; the hiding-place was laid bare, and the old tomato-tin that held the whole of their scanty store of hard-won dust was gone. With half-raised hands and round, staring eyeballs, he stood rooted to the spot, glaring in mute agony at the empty corner, oblivious of the presence of his chum—oblivious of everything save the fact that he was now a prisoner in a lone land, far from her whom his weary heart hungered for.

With a savage oath Twilight Ben sprang to the corner, and, dropping on his knees, scratched with his fingers like a dog among the loose earth. A minute sufficed to show the futility of such a search. Then Twilight Ben rose to his feet, and lifted up his voice and cursed. From gulch and mining-camp, from forecastle and gambling-hell, from ranch and saloon, the hoary old sinner had gathered in a stock of profanity such as would have awed the veriest ruffian of the Bowery into

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speechless wonder; and now the reservoir of his blasphemy burst its bounds, and gushed from his lips in one continuous, appalling avalanche. Mexican oaths jangled fiercely against deep British curses; anathemas and execrations from every land and every clime trod wildly on the heels of one another, and the unhallowed slang of mining-camp and ranch rounded off the awful deluge into one incessant stream. And yet Honest Jim heard never a word of the awful abuse. His unwinking eyes stared straight before him. His half-raised hands had neither risen nor fallen a fraction of an inch. He was turned to stone—ice—anything that is cold and immovable.

At length the torrent of fierce invective ceased -ceased because of want of breath-and the old reprobate sat down, gasping, on an upturned Still the latter bucket and looked at Jim. maintained his dazed, petrified pose. Twilight Ben had never seen a man take a misfortune like this, and his one piercing eye fastened on the strange sight. By degrees a feeling of unaccountable uneasiness began to mingle with his curiosity. He got up and kicked the iron bucket over with as much racket as he could conveniently get out of the operation. Yet Jim gave no sign. This unprecedented state of things was intolerable. For a few seconds Ben cogitated; then, unable to bear the oppressiveness of it longer, he strode up to the statuesque figure near the door, and digging it in the ribs, jerked out querulously:

'Say, pard, ain't it 'bout time you started in to cuss?'

The touch recalled Jim to his senses with a violent start. His hands dropped listlessly to his sides, and he blushed like a boy of fourteen detected in the act of writing a youthful loveletter to a schoolmate's sister.

'Say, pard,' the other repeated, 'ain't you going to cuss?'

'No,' replied Jim slowly and solemnly; 'I'm —going—to—pray!'

And there, in the centre of the comfortless hut, on the cold, hard earth, with no stuffed hassock or softly-upholstered *pric-dieu* to lessen the irksomeness of *devotion(l)*, he fell upon his knees and stretched out his clasped hands before him in earnest supplication.

Once, when, during a brief industrious spell, he was trapping in the Rockies, and was sitting alone in the tent, a shadow fell upon him, and turning round to greet his returning chum, he found himself hugged by a grizzly, Twilight Ben had been surprised. Still more surprised was he when, after a desperate struggle, he came out of the encounter alive and comparatively unhurt. Then, in spite of his extensive vocabulary and his abnormal skill in using it, words suitable to the occasion failed him. They failed him now. The bewildering unexpectedness of Jim's speech and simultaneous action staggered him. His

sightless eye-socket opened, and the turned-up half of his moustache bristled like the quills of a porcupine at bay. Instinctively he gave one sobbing gasp of astonishment, and waited for what was to follow. And as he waited, with his gaze riveted on the kneeling figure on the ground, his wonder grew, for he expected to hear Jim fiercely beseech the Lord to restore the lost treasure, and pour out all the vials of His wrath upon the head of the thief; but no such vengeful petition came from his lips.

No glib string of stereotyped pious phrases came gliding from his tongue. For a few minutes he knelt there silently struggling—not praying—to shape his unwieldy thoughts. Then came, slowly, brokenly, the first words, uttered laboriously. His big breast heaved, his clasped hands clutched each other with an iron grip, and the perspiration trickled down over the knotted veins on his temples, as he literally wrestled in prayer—not for himself, not for the lost gold, but for the sinner who had wronged him.

Twilight Ben grew uncomfortable. Once or twice in his career he had heard at camp-meetings and revival services, to which curiosity had led him, evangelists pour out loud, voluble, and sometimes incoherent forms of supplication and praise; but never before had he witnessed a human soul in the painful agony of desperate, earnest prayer, and it awed the brute within him. Without knowing why, he took off his hat, and spat on his hands and rubbed them on his corduroy trousers to make them cleaner. He fidgeted uneasily as his discomfort increased, and took the quid out of his mouth and held it in his hand. The situation pressed tighter and tighter upon him, until he could bear it no longer. An indefinable dread seized him.

'Blamed ef ever I knowed I was so tetchy afore; but this yer gospel-jerking, when they git down to wrastling with the bed-rock, ruther gits the bulge on me, he muttered uneasily to himself. 'I calkerlate I'd better jest vamoose the ranch.' And he quietly sidled out of the hut,

Once out in the open, he felt that he could breathe more freely, yet he remained standing near the door, where he could both see and hear the earnest suppliant within, as he strove, haltingly and disjointedly, to plead that the transgressor might be snatched from the clutches of sin; and when at length Jim rose to his feet and turned towards the door, Twilight Ben, with a feeling of inexpressible relief, jerked his plug back into his cheek, clapped on his hat, and sauntered away towards the workings.

It was another Jim Vickerson—more like the old one—that strode out of the hut. A great and evident change had been wrought upon him. The sudden shock of greater misfortune had shaken him free from the toils. The leaden glamour of that weird, monotonous

region no longer enchained him. Home-sickness and the depression consequent on unrewarded labour had field from him, and he was himself once more—strong in determination to win a home of ease and a life of happy comfort for the little 'Linda that was waiting for him in the flower-twined schoolhouse far away over the dreary plains and terrible fastnesses.

As he gained the open air Twilight Ben had reached the top of the shaft. While looking moodily down, the foot or two of earth upon which he stood suddenly gave way, and he disappeared. As he fell one side of the pit caved in; and when, with a cry of horror, Jim reached the spot, nothing was to be seen at the bottom of the shaft but a mass of loose gravel. Snatching a shovel, he leaped down upon the fallen heap of débris, and worked as he had never worked before to shift the rubbish. It was slowterribly slow; for the best he could do was but to shift the stuff from one side to another, and all along the thought haunted him that he might with his own weight be trampling the last remnant of life out of the comrade he was working to save. Minutes dragged slowly by. An hour had passed, and his frenzied efforts redoubled themselves. At length, while pausing for a moment to wipe his streaming forehead, he thought he heard a faint, muffled sound like that of a human voice. He listened intently. It was his chum's, and it came from the direction of the tunnel, the entrance to which had been covered by the fall. With a definite guide now to direct him, Jim fell to work again with brighter hopes. In another quarter of an hour the entombed miner was released, little the worse for his imprisonment. Luckily for him, he had fallen with his head and shoulders inside the tunnel, free of the weight of earth that held his body and limbs immovable, and so had escaped suffocation. The shock had, however, knocked him senseless; and it was when he cried out, as soon as he came to himself, that Jim heard him. With no bones broken, a few hours' rest in his hammock soon put him right again, except for a stiffness and soreness that lasted for some days to remind him of his narrow escape.

As may easily be supposed, when Jim turned into his bunk some hours subsequent to the rescue, what with his journey to Fort Cudahy and the experiences he went through immediately after his return, he slept the heavy sleep of the wearied. On awaking he noticed the hide in the corner of the hut had been restored to its usual state of studied unsuspiciousness, and the end of a log luid negligently over it. The older miner was out. Jim examined the spot closely. The old tomato-tin, with its golden contents, had returned to its place. Jim went out and joined his partner at the cradle. Together they worked for hours, mostly in silence, and not a word passed on the subject that was uppermost

in both their minds, until Twilight Ben suddenly dropped his shovel and abruptly strode across to the other. For a minute they stood facing one another without a word. Then:

'Say, pard, did yer savvy (Anglice: know by perception) who the durned skunk was who stole that dust?'

'Wall, I kinder guessed,' Jim replied, with a quiet smile.

'Then why the tarnal did you scratch me outer that thar landslip fur, when you knowed I'd been playing it low down on you like that?'

"Cos I reckon I couldn't do no other."

'You—couldn't—— Dog my cats ef you ain't the durnedest, queerest cuss I ever come across!' exclaimed Twilight Ben. 'And I like you! Put it thar!'

Jim took the proffered hand in his. The firm, hearty grip betokened the commencement of a new era in the partnership of the curiously matched pair. And so the evil scheme passed out of Twilight Ben's warped brain, and he had no longer any thought to work the young man harm.

The brief summer was quickly passing away, and still no sign of luck came their way. Twilight Ben himself had arrived at the conclusion that it was folly to waste any more time in working their claim on the Forty Mile, when it suddenly became known that prospectors had struck it rich on the Bonanza Creek. The information was quickly verified, and the Klondyke leapt into local fame as the new Eldorado. Unfortunately the coming winter was already within measurable distance, and provisions were none too plentiful. Many of the miners in the latest-discovered field would - rather than face another winter of darkness and privation that killed several and drove others stark mad-after working their new claims for a few weeks, drop down to Circle City for the long, dreary spell of icy darkness, to relieve the tedious hours with gambling and bad whisky. As for Jim and Twilight Ben, they spent the whole of their dearly-got gold at Fort Cudahy in buying provisions at exorbitant prices; and packing upcountry, they staked out their new claims well up towards the head of the Bonanza, and determined to fight out the winter there on an insufficient larder, in the hope of killing a stray moose or bear to help things along. Their first prospects were encouragingly successful, showing two to four dollars to the pan; and by the time the river closed and the winter set in they had washed about three thousand dollars. With a good heart, confident now that they were not wasting their energy in digging worthless rubbish, they faced the trying ordeal, and occupied themselves, as they had done the previous winter, in throwing up a dump of the ice-bound pay-dirt in readiness to be washed as soon as the returning sun should release the water-supply.

SOME NEW USES FOR PEAT.



LMOST everybody knows that from time to time articles have been discovered in peat-bogs strangely preserved; but it was not till lately that people began to think that this strange preserving power

in peat might be put to some use. The first trials made were simply with peat in the form of powder, and it was found to be so effective that several experts looked into the matter, and after long and arduous experiments, made what is now so well known as peat-wool dressing.

This surgical wool is extremely absorbent—in fact, much more so than ordinary wool, although somewhat slower in absorbing the liquids; and it is predicted that there is a big future before it, especially in army surgery, where its small bulk makes it very convenient for transport; and its deodorising power is great.

Another product of peat is a roughly-woven material manufactured from the fibres which may be seen running through a mass of peat. This cloth is much used for felt and undercarpeting, as there seems to be a property in this fibre which is very antagonistic to the life of animals and insects of all kinds. People who have examined this material have expressed their astonishment that such a strong and useful cloth could be made from the apparently worthless peat.

A further development is the compressing the peat into solid blocks, so hard that it is with the greatest difficulty they can be turned on a lathe; indeed, they very often blunt the edge of the finest-tempered tools. These blocks can be so polished that they resemble finely polished oak, and in gloss and colour they are far more beautiful.

A well-known Continental firm (Messrs Brion, Pate, Burke, & Co., 4 Rue de Frerise, Paris; the London agents being the Peat Industries Syndicate) has, within the last few months, brought out a very ingenious application. 'Peat flannel'—for so it is called—is a fine, delicately shaded flannel, containing a considerable portion of peat in its contexture, and, as far as hygienic qualities are concerned, is said to be far superior to many of the so-called hygienic flannels now in the market, besides being very suitable for all outdoor sports. It is extremely deodorant and absorbent, and seems likely to become very well known in a few years.

Moss litter for horses, &c., is highly prized by farmers and horse-owners for its healthy and sanitary properties. Peat charcoal is valuable in iron-smelting and in tempering cutlery; and admirable flower-pots are made of compressed peat. Petroleum or paraffin is distilled from peat.

Experiments have also been made as to the effect peat has on micro-organisms, and it was found that although peat can hardly be called a germicide, still it possesses the power of considerably retarding the propagation of typhoid and cholera germs.

Anything likely to encourage the utilisation of peat, which opens up a way for the development of the now almost useless peat moors and bogs throughout Great Britain, would be looked upon as a blessing by the owners of these lands.

Tennyson, it will be remembered, founded his Irish poem 'To-morrow' on a story related to him by Aubrey de Vere, which ran as follows: 'The body of a young man was laid out on the grass by the door of a chapel in the west of Ireland, and an old woman came and recognised it as that of her young lover, who had been lost in a peat-bog many years before; the peat having kept him fresh and fair as when she last saw him.'

THE FRENCH INVASION OF 1797.

By CHARLES EDWARDES.



ITH 1897 just behind us, we can afford to laugh at the French invasion of England in 1797; but our ancestors, for a day or two at least, thought it no laughing matter. The 3 per centconsols stood on Friday the 24th of

February 1797 at $52\frac{1}{2}$. The next day, after the publication of the London Gazette Extraordinary with news from Haverfordwest of the Fishguard landing, they fell to $50\frac{1}{4}$. That same evening, at a council held in Mr Pitt's house, it was decided to send a messenger immediately to Windsor, to request the king's attendance. His Majesty was present at

the Sunday council, and London's excitement in this unique event was intense. Money payments at the Bank of England were to be withheld; and, in sympathy with the wishes of the Cabinet council, there appeared in the Times of Tuesday the 28th no fewer than six columns of names of merchants and bankers appended to the undertaking 'that we will not refuse to receive banknotes in payment of any sum of money to be paid to us.' By then, however, the scare was over. Even on Monday consols were up again to 524. The following authoritative intimation from Haverfordwest, under date February 24, 9 p.M.

had tranquillised both the Cabinet and the City: 'I have the honour and pleasure to inform your Grace (the Duke of Portland) that the whole of the French troops, amounting to near 1400 men, have surrendered, and are now on their march to Haverfordwest.' The invaders had had their chances, and had misused them.

The scene of the brief yet stirring event was the rough, rectangular promoutory of Pen Caer, in Pembrokeshire, bounded on the west by the bold purple cliffs of Strumble Head. In rough weather this part of the coast was eminently unsuited for an invasion. But Tuesday the 21st has been described by a Pembrokeshire worthy of the period as 'the finest day ever remembered at such a season, when all nature, earth, and ocean wore an air of unusual serenity.' The three frigates, with their cargo of six hundred regular French troops and eight hundred so-called convicts, passed St David's flying English colours. As British vessels they were about to be saluted by the fort at Fishguard when they sailed into the mouth of the bay. But Fishguard was spared this humiliation by the sudden change from British to French colours. After this the vessels drew back a little, and finally anchored off the rocks of Carreg Gwastad Point. A St David's gentleman had watched the vessels suspiciously, until his suspicions developed into certainty. He was an old seaman, and he believed the ships were French, and that the troops on board were for local aggressive purposes. He raised the district, so that, while Fishguard was taking measures to secure its property and obtain troops, St David's was mustering bravely for attack, and even stripping the lead from its cathedral roof for the blacksmiths to mould into bullets.

Under the command of a certain Irish-American named Tate, the invaders made a very vigorous beginning. Their landing-place was not sufficiently secure for an encampment. The men therefore pushed on to the little white-cotted village of Llanwnda, a constant rise from the sea-level, and passing its village green (doubtless then as now the resort of the local gossipers, including droves of garrulous geese), climbed the rocky plateau on the other side, They did more. They dragged casks of ammunition with them, and made all ready for holding a fairly defensible situation. If Tate could have kept all his men as well disciplined as these workers, he might have made a strong show even against Lord Cawdor's forces. But while some were thus perspiring in the darkness, others were dispersed about the rugged headland, which was, and is, far more populous than the nature of the soil would seem to justify. Farmstead after farmstead was entered and sacked. The Llanwnda geese were especially attractive to the invaders. 'Not a fowl,' it is said, 'was left alive, and the geese were literally boiled in butter.' As it happened, there had recently been hereabouts the wreck of a vessel laden with wine. One result of this was

that the Welshmen's cottages were all surprisingly blessed with good liquor. The sequel was of course One after another General Tate's inevitable. precious crew became very drunk, and the majority unmanageable besides. Mr Fenton, the county authority already quoted, tells us that 'the veil of night was kindly drawn over their execrable orgies, disgraceful to nature, and which humanity shudders to imagine.' Really, however, nothing so inordinately dreadful seems to have occurred. At least there is no circumstantial account of the invasion which it revolts one to read. The first report, in the Times of February 27, is not of a very sanguinary kind. We learn that the very children of Pen Caer took up reaping-hooks and abetted their parents in defence of their property. Four Frenchmen are then said to have been killed -two by a father and his son, who caught them helping themselves to calves in a stable; and a third having been dismally run through with a pitchfork 'while regaling himself with ale and bread and cheese.' By then the mortality among the Welsh was two only. And, as a matter of fact, this about represents the whole loss of life in the affair. What would have happened if Tate could have kept his men sober, and marched them promptly over the hills and down to Fishguard (which was quite worth sacking), one can, of course, only conjecture. The pretty little town was then a place of fair importance for its trade with the Mediterranean in cured red and white herrings, and there were country-houses hard by, including Mr Fenton's, which would assuredly have yielded better spoil than the stumpy white homesteads of Pen Caer.

The drinking and the boiling of geese in butter went on gaily enough throughout Wednesday. Tate must then have seen that it was all up even with his chance of leaving a memorable mark on the neighbourhood. He was at Trehowel Farm, whither he had been led by a Welshman named Bowen, who was with his troops, and who had formerly worked on the farm. Like his men, he lived freely on the produce of his environment. Not content with eating the hams and geese, he 'eviscerated the feather beds for the sake of the tick, burnt the furniture, and left a mere shell to greet the return of the proprietor.' At another farmhouse one may still see a grandfather's clock with a bullet-hole nicely middled in its case. A tipsy Frenchman shot it, presumably taking its pendulum for the tongue of a challenger. Llanwnda church was bound to suffer. It is an ancient little building, with heavy arches, an old font, and some interesting decorated stones embedded in its outer walls; and in its churchyard are a surprising number of mortuary tablets to mastermariners. But it was not likely to yield much plunder. One of the French officers laid hands on the church plate. The chalice in use is the one that thus suffered some slight vicissitudes. It is much cracked and dented, and bears the in-

scription, 'Poculum Ecclesiæ de Llanwnda.' After the failure of the invasion, its purloiner offered it for sale in Carmarthen, with the feeble lie that the word 'Llanwnda' stood for 'La Vendée,' of which royalist district of France he declared it to be a relic. But the Carmarthen silversmith was not thus deceived, and eventually the little church came by its own again. As for the rank and file of the invaders, aggrieved by the nakedness of Llanwnda church, they destroyed all in it they could lay hands on, and set fire to the pews and other combustible matter. From a hiding-place above the rood-loft a nursemaid and child peeped down upon the depredators, no doubt with misgivings. But they were not burned to death, nor did they fall into the hands of the tipsy ransackers and suffer as probably they expected to suffer.

There are tales extant of the wonders wrought by the local peasantry in defence of their homes. The heroism of Jemima Nicolas is a case in point. This sturdy damsel, armed only with a pitchfork, advanced against twelve Frenchmen. Her tongue and the pitchfork conjointly prevailed over the twelve, so that she had little difficulty in leading the dozen prisoners to Fishguard. But who except a Welshman of Pen Caer is likely to believe such a yarn as this? Again, there is the picturesque story of the muster of Pembrokeshire dames on the adjacent hillsides. In their red woollen 'whittles' and tall hats, they were of course a very fair imitation of fighting-men; and as such they are said to have marched and countermarched before the eyes of the wine-sodden Frenchmen. This at any rate is moderately credible, if we assume, as we may, that the ladies wore their skirts as short as some of the Welsh peasant women are accustomed, in their daily vocations, still to wear them.

After all, however, circumstances unaided were the worst foe Tate and his men had to fight.

The invasion soon proved a farce. The camp that was formed on the Tuesday night had lost its importance by Thursday. The Frenchmen had eaten their vicinity bare, and Lord Cawdor, with the Castle Martin yeomanry, the Cardiganshire militia, two companies of fencibles, and a scratch lot of volunteers, was approaching the marshy lowlands between Fishguard and the pleasant little modern pleasure-resort of Goodwic, on the Fishguard side of Pen Caer. A strange new calamity precipitated matters: the three frigates sailed away to the north, leaving Tate to enjoy his conquest or his calamity by himself. And so, on the Thursday evening, the Frenchmen tried to treat with Lord Cawdor. But no terms were admissible. His lordship proposed to attack the Llanwnda camp with ten thousand men unless the invaders laid down their arms as prisoners of war. An effective little brag like this was permissible enough, and no wrong is done to the Fishguard fencibles and the rest in the supposition that they were all very relieved when General Tate, after an anxious meditative night, marched down to Goodwic sands on the Friday morning and surrendered without bloodshed.

The subsequent fate of the captured Frenchmen need not be dwelt on. Some were sent to Pembroke Castle, where five-and-twenty escaped in Lord Cawdor's own yacht, having first won the tender hearts of the women who looked after them, and then burrowed some sixty yards through the ground. It was not well to be a prisoner of war in those days. Nevertheless, we prefer not to believe the tale told about certain other of these invaders confined at Porchester Castle, in Hampshire. They are said to have laid hands on Lord Cawdor's horse and eaten it when he one day paid them the civility of a visit. It was surely enough that his lordship should have his yacht pilfered without having his horse cut into steaks and collops.

GAS-WORKS MANAGEMENT AND CONSUMERS' INTERESTS.

BY A DIRECTOR.



HERE is undoubtedly very much misconception in the minds of gasconsumers everywhere on subjects concerning gas-works, such as the management thereof generally, and the relation of the gas industry to

its customers. Gas-men are usually considered to be prejudiced; but when one is both a householder and a gas-consumer in the same district, some degree of accuracy and impartiality may be claimed herein.

A gas company is a concern constituted primarily to supply a public necessity—namely, light during the hours of darkness; and latterly gas has become a household requisite for cooking and heating purposes, and is also extensively used for

motive-power. Most of the existing companies were formed many years ago in the comparative infancy of gas-lighting; and as progress was then very doubtful, the money required for promotion was generally difficult to raise; hence the high rate of interest that was allowed by parliament. The argument of 'bloated dividends' still holds sway, and is even now a sore point with consumers; but these are relics of the past, and are practically not the happy experience of shareholders of to-day, whose holdings have been mostly acquired at market prices, and consequently do not realise the high rate of interest they bear upon their face. This rate is undoubtedly high when viewed in the light of present experience; but all honour must be accorded to the pioneers of this industry who risked their money in a doubtful venture, the grand success and brilliant future of which nobody could foresee, and we should not grudge them their good fortune. Many concerns groan almost under the weight of a comparatively heavy capital charge, but that cannot now be helped, and we should quietly bear our share of the burden (if it can be so called in the light of what follows), that of our predecessors having been a natural anxiety as to their investment.

Constituted by act of parliament as a rule, a gas company is confined within limits not generally understood nor recognised. It may pay its statutory dividends, but the price of the commodity to be charged to the consumer must not trespass beyond a certain point. After paying its full dividends, keeping the works in good order and repair, and setting aside gradually a reserve fund, all further profits must go to reduce the price of gas. Quality is also determined, a penalty being sometimes attached for defect therein. As a rule an aggregate amount, equal to ten per cent. only on the prescribed capital, can be retained out of profits to form the reserve fund; and that fund can only be called upon for certain specific purposes. Also, generally no depreciation fund is permitted; so that quality is defined, and dividend and reserve fund are absolutely restricted—everything, in fact, being regulated to the ultimate advantage of the consumers.

It will thus be seen that consumers have a direct, and by no means insignificant, interest in a gas company. Thirty years ago the price charged for gas may have been ten shillings per 1000 cubic feet; whereas it is now possibly only three shillings and sixpence to two shillings; in large, thickly-populated towns even less, according to the district. This means that, comparatively, consumers are obtaining nowadays for the same quantity of light practically a dividend equal to a high rate of interest on the amount of their annual accounts, with no more serious capital outlay than the cost of fittings; or are able for the same money to have a lighting capacity for their premises two or three times greater than formerly. The greater the consumption of the district, the more economically is gas produced; and the surplus profit thereby realised belongs, not to the shareholders, but to the consumers. Sometimes a sliding-scale is in operation, whereby the shareholders get so much increased or decreased percentage of dividend, according as the price of gas is lowered or raised beyond a certain fixed standard. But, generally speaking, the consumers of to-day have obtained all the innumerable advantages of economy of manufacture, of greater science and skill, of the introduction of machinery, and of cheap coal that have for many years been in evidence; so that almost without exception the price of gas everywhere is at the lowest point it has ever reached, a consideration which is entirely in the consumers' interest. Thus, whilst the gas industry is decried as a 'monopoly'—which means, in other words, that the shareholders have obtained all that was legally due to them, and nothing more—consumers have year after year reaped all the benefits of cheaper production, and are therefore to all intents and purposes partners in the concern, participating largely in its progressive prosperity.

Moreover, what has the Welsbach incandescent system done for the consumer? The writer's experience is, that one such burner does the duty of three ordinary burners; and as it consumes so much less gas than one ordinary burner as, with a certain amount of care, will pay the annual cost of renewals of mantles and chimneys, it follows that the same amount of light may be obtained therewith at one-third the cost of former years. The 'care' referred to consists principally in the manner in which the mantle is at first fixed, and a little personal attention thereto will be found to pay best generally.

In connection with such economy of lighting as is claimed by the above system, and having regard to the competition of the electric light, it may be pertinently asked how, in the extensive adoption of both these systems which undoubtedly obtains-the first reducing, and the second substituting, consumption of gas-gas-works go on prospering and increasing their production, as seems to be the case. There is little doubt that in a well-regulated household-and such, let us hope, are in the majority—the chief allots so much annual income to the gas bill; and when that is found to be on a moderate, and perhaps decreasing scale, then is considered a fitting time to put up a heating or to introduce a cooking stove. So the consumption of gas is kept at its normal quantity, or is even allowed, on account of these facilities which economise in other directions, to exceed that; but the bill, owing to continued reductions in price, remains practically the same. Undoubtedly a heating or cooking stove, when well fixed, is very clean, serviceable, and economical, provided it is not allowed to be used wastefully.

The gas-man, whether director, manager, collector, or what not, must have a very broad back, and be prepared with equanimity to be termed liar, thief, rogue, or such-like; he is fairer game than almost any other, and is 'shot at' without mercy or computction all round. The director is generally considered to be one who has little to do, and gets well paid for doing the same as badly as it can be done. He seems to delight in causing the greatest amount of exasperation to a wide circle; it is his business almost to defraud the public in as legal a manner as possible, and to carry out that policy of 'grasping rapacity and extortion' with which all gas companies are credited. He has even been accused of supplying better gas to his own house than to adjacent premises. The manager, who is also usually engineer, is the individual who invariably makes a bad article, and sits comfortably in his office, or perhaps on the top of the governor—not the chairman, by the way, but the instrument for regulating pressure throughout the district—driving gas through the meters attached to the houses in his domain whether consumers are willingly utilising it or not. His one other duty perhaps is to see that the quarterly bills are made out sufficiently large from figures mysteriously supplied by the myrmidons sent abroad to read the meter indices.

If it is possible for the average gas-consumer to believe one of the above-mentioned public (but hitherto unpunished) criminals, let me state briefly what are the true facts in connection with these much-despised, wholly-unappreciated public servants. The director always stands immediately between two fires—the shareholders on one side, and the consumers on the other. Elected by the former, who live perhaps mostly miles away from the district, he is expected regularly to furnish the full statutory dividend, to see that the works are kept in good order, and to provide a decent annual statement. So long as these matters are right the shareholders are satisfied. Directors must necessarily consider shareholders' claims first and foremost, as required by act of parliament, other things being equal, and because they are their officers. But, on the other hand, directors must, and do, carefully consider the consumers' interests. They must be shareholders themselves, and most frequently they are consumers also in the same district; so that from a purely personal point of view they are directly interested both ways. They do strive from various motives, and in divers ways, to keep down the price of gas. When a reduction (say of threepence) is made, they get no thanks; the concession is swallowed as a thing that ought to be, or rather ought to have occurred long ago; but let them raise the price by so little as a penny, and at once there is a howl of execration from all sides, no matter what the circumstances may be that cause the necessity for this unhappy incident. Gas never is too cheap anywhere; if it were given free of cost, it would always be at least bad. The excess profits over the dividend of any year belong by right to the consumers, and must be utilised when sufficiently ample to reduce price; and directors do think a lot of those profits, superfluous as to dividend, in connection with the consumers. A reduction of a penny in price seems, and is generally considered by the public, to be a trivial thing; its real value should, however, be estimated by the wrath and indignation with which an increase of a similar amount is received. Also, it is not remembered that such reductions, following one another year after year, amount to a respectable item in the course of a few years; nor that reductions have been for a long time the rule, whilst increase has been very exceptional.

The above remarks concerning the director will apply also to the manager: if there is any difference, it can only be to emphasise them in the latter case. The director may be waylaid and brow-beaten, but how much more the poor manager! Whilst bearing the burden and heat of the day in connection with his particular profession, he has to listen with patience and forbearance to the individual complaints of all those ills with which gas apparently is afflicted, at least in the opinion of a certain number of people. This is no light task, for with many it is impossible to argue. You may explain that the fault may not be altogether in the gas itself, but with some degree of probability in connection with fittings or burners, but in vain; the gas is abominable, and the way it runs through the meter is a deep mystery! My opinion of the gas manager is briefly this: however small the works may be, he must understand his business, must have had therein a certain amount of experience. Beyond these qualifications, you will frequently find him intelligent, sometimes even clever and ingenious, enthusiastic in his duties, generally on the lookout for some improvement in the details of his work; and if he does not sympathise with his customers in their troubles and help them in their gassy difficulties, such an one may be considered generally an unsuccessful man. This is particularly the case with companies; when corporations own the works, all the officials are more independent in every way.

It is the best policy of directors to order, and of managers to make, gas good in quality, not only as regards illuminating power, but also in point of purity; and this is usually the policy adopted. If the quality varies by two and a half per cent.-which may be taken to mean half a candle, an almost extreme variation-it is sure to be heard of at the works. Many things may cause unintentional deviation from routine, such as unexpected sudden demand from one cause or another. But complaints of 'bad gas' nearly always arise from defective fittings or worn-out burners. Burners require changing occasionally; new ones should be obtained from the gas office. The truth of this remark may be verified by visiting a few houses on the same night in the same district, or sometimes even by examining in one's own house the gas in different rooms; a variation will almost certainly be discovered more or less pronounced, which can only be accounted for as has been suggested, for it is the same gas, but it is evidently not obtaining the same equal chance everywhere. Many companies by their special act are allowed to supply gas at as low quality as fourteen or fifteen candles, whereas in order to meet the requirements of their district they actually make their gas up to eighteen or nineteen candles. For this they get no credit; but as a matter of fact each candle extra costs from a penny to three-halfpence, according to locality, so that many companies could 'reduce price' by sixpence by adhering strictly to the letter of their constitution. A gas richer than eighteen candles is unnecessary, and unless such is used through special burners there is much waste with it, and consequent loss to the consumer.

'Dear gas' is a chronic complaint. A scattered country district, with miles of only partially productive mains, is inconsiderately presumed by many to be in the same position to obtain gas from its local works as a town with its streets of closely - built houses, shops, workshops, &c. One hears regularly the pathetic lament that in the country gas is three shillings and sixpence, whereas in the adjacent town it is only two shillings and sixpence. Comparatively the former price may be much the cheaper, if due regard is given to the differing circumstances of the two cases.

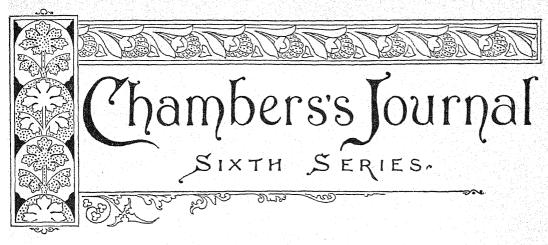
The meter is a thing that no gas-consumer can understand, except when the bill is smaller than anticipated, owing perhaps to difference of weather, which is an important factor in the case. If the bill is larger than usual, the gas has certainly not been used, and something must be wrong with the meter! From the commencement of housekeeping, when the writer had no direct interest in gas matters beyond a consumer's, the following plan was adopted, and has since been carried out methodically: every week the meter index has been read and noted, and the weekly variations have been weighed up and accounted for. That cannot be accomplished at the end of the quarter, for one cannot remember the weather variations, the differences in the days' shades of light, or perhaps the dinnerparties, and so forth, any of which make a lot of difference between one corresponding quarter and another. During all this time not one single error has been discovered in the accounts. Much waste occurs in the household unless a certain amount of care is exercised; servants will leave too much gas turned on when it is not required, and in their rooms they are generally reckless and extravagant with gas, especially if no notice is taken of the matter by the mistress. The gas bill is like the proverbial red rag in front of a bull: it never satisfies the average consumer as to its accuracy, and the moment of its arrival frequently disturbs the domestic peace. The writer can only repeat in its favour that he never at any time found an error in his accounts. Meters are wonderful but reliable machines, that do their work on the whole in a fair and honest way; if they are considered to be out of order, the consumer can have them tested free of charge when discovered to be erratic,

The discount system is in vogue in some places, and is generally successful, but occasionally generates discontent among the few who by their own carelessness miss getting it. If the account is paid by a certain date, so much discount is allowed therefrom. The date must be

strictly adhered to, in common fairness to the majority who take the trouble to pay in time. It is usually attributed to the company, when they refuse to accept any excuse from a delinguent, that they are unbusiness-like-whereas the boot is really on the other leg-and that they are advantaging themselves pecuniarily by their sharp practice; when, as a matter of fact, all discounts so forfeited may be practically considered as items which go to assist a future reduction in price. The system involves no more inconvenience to consumers than the call of a collector, perhaps several times repeated, was wont to do: and is a matter of great economy to the company, again to the interest of consumers, to whom it means perhaps a reduction of a penny in the price of gas by the saving effected.

Little need be said here as to the competition of electricity with gas. Experience has proved it as a fact, whatever may be the reason therefor, that wherever electricity has been introduced, gas consumption has increased rapidly. Gas remains the economical light of the country, for unquestionably it is much cheaper than electricity so far, even when all the advantages claimed for the latter are taken into account: whilst electricity may be viewed sometimes as a great convenience, yet always as a luxury. There is undoubtedly room for both in the world, and the competition between them is a healthy one. It is an interesting struggle between these two great producers of artificial light, and the issue is by no means yet narrowed down to the question of the survival of the fittest. So far, where both come into direct competition, there is simply a matter of choice between the two, each perhaps possessing distinct advantages for individual preference; at least the general or final result must be universally beneficial. Electricity has probably the largest area for experimental research and improvement.

On the whole, it may be claimed for gas companies that for very many years they have supplied a necessity of the times; that they have been good and useful public servants; and that they have done, and are doing, their duty by their customers, just as much as by their shareholders. And the point most desirable to emphasise is, that they are well-regulated, progressive commercial enterprises, directed and managed on sound business principles, not altogether nor exclusively in the interests of shareholders, as the idea so generally seems to be, but to a very appreciable extent with regard to the interests and for the benefit of their customers. In short, gas companies to-day are not the 'absolute and perpetual monopolies' of bygone years, if only for the weighty reason that the total economies that have brought the price of gas everywhere down to its present low point have been thereby appropriated absolutely by the consumers.



THE STORY OF A BURNS FIND.

By the Author of The Book-hunter in London.



COMPARATIVELY recent article in Chambers's Journal on 'The Providence of Book-hunters' has induced me to put on paper one of the most singular bits of luck which ever came in the way of either

bookseller or collector. The story dates back some years; but as it is now recorded for the first time it is none the less fresh.

All the world knows that chief amongst Burns's friends during the early portion of his residence at Dumfries were Mr and Mrs Riddell. Those who will turn to the second edition (1813) of Cromek's Reliques of Robert Burns, page 188, will find this paragraph: 'The chief part of the following remarks on Scottish Songs and Ballads exists in the handwriting of Robert Burns, in an interleaved copy, in four volumes 8vo, of Johnson's Scots Musical Museum. They were written by the Poet for Capt. Riddell of Glenriddell, whose autograph the volumes bear. These valuable volumes were left by Mrs Riddell to her niece, Miss Eliza Bayley (whose autograph the volumes also bear), of Manchester, by whose kindness the editor is enabled to give to the Public transcripts of this amusing and miscellaneous collection.

The history, therefore, of *The Scots Musical Museum*, interleaved, and with upwards of one hundred and forty interesting notes in the handwriting of the poet Robert Burns, is clear and distinct up to the time of Cromek's edition of 1813. For over half-a-century nothing more apparently was heard of these 'reliques.' Miss Bayley died in due course, and bequeathed them to a friend, at whose death they were again inherited by a lady, who, knowing nothing whatever of their value and interest, called in a well-known second-hand bookseller, Mr John Salkeld, then of Orange Street, Red Lion Square (but now of Clapham Road), London. These volumes, along with an autograph presentation copy of Burns's *Poems* (Edinburgh, 1793) and much other miscellane-

ous matter, were offered to Mr Salkeld at a small figure, and, at that price, cleared without more than a mere passing examination. Previous to this, a quantity of manuscripts, pamphlets, and so forth, inherited from the same source, had been destroyed, and the astonishing fact is that the Musical Museum did not share the same fate.

The books were duly conveyed to Orange Street, and some days elapsed before they were examined for catalogue purposes. In the meantime a very smart bookseller called, and, in grubbing about, picked up the Musical Museum. He glanced over it first casually, and then carefully, and demanded: 'How much do you want for this?' 'Five pounds,' was the random answer of the owner, who loved not the rival tradesman. 'I will give you three pounds,' was the immediate offer, which Mr Salkeld promptly refused. The smart bookseller left the shop, only to return the following day with a fivepound note and a demand for the books. It was too late; for the owner's curiosity had been excited, and a very brief examination showed him the extraordinary interest of his purchase. The price suddenly went up to a hundred and ten guineas. The smart man left without the books, but with the firm conviction, which he did not hesitate to express, that the other man was mad.

In the next Salkeld catalogue, No. 51, these Burns 'reliques' make a good show, the description occupying two pages, and include a number of articles which had no connection with the poet, but only with his friends the Riddells. The catalogues were duly posted, the country ones first, and the town ones a day later, as is the custom. Within forty-eight hours there came up to London a well-known provincial bookseller, who demanded the little collection for ready cash at ninety pounds. This offer was refused, and the disappointed bibliopole left the shop with his money in his pocket, and perhaps, like the former bookseller, with the conviction in his soul that the London man was stark, staring mad.

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During the bartering, an old customer, who had missed the new catalogue, had been quietly 'browsing' amongst the books in the shop; and when the provincial gentleman left, he asked permission to see the collection. The request was of course immediately granted, to be followed almost as quickly by the purchase and the conveyance of the collection away in a cab to his residence in Barnsbury, where it now is.

Of course, the provincial bookseller again turned up a few hours later, prepared to give the full catalogue price; but I will mercifully draw a veil over his consternation when he discovered that the collection had not only been sold, but actually removed. The 'moral' of this little story is fairly obvious; for here were two exceptionally smart booksellers who overreached themselves, each in turn offering what both must have known was an inadequate amount for what Allan Cunningham truly describes as 'precious volumes.'

The Scots Musical Museum, 'humbly dedicated to the Catch Club, instituted at Edinburgh, June 1771, by James Johnson,' is, it need hardly be said, the gem. of the collection, which altogether comprises fourteen volumes. The copy of the Poems already mentioned is also unique in its way, and the absence of Beugo's portrait is more than compensated for by the presence of the following characteristic note in Burns's auto-

graph: 'When you and I, my dear sir, have passed that bourne whence no traveller returns, should these volumes survive us, I wish the future Reader of this Page to be informed that they were the pledge of a Friendship, ardent and grateful on my part as it was kind and generous on yours-That Enjoyment may mark your days and Pleasure number your years, is the earnest prayer of, my dr. sir, your much indebted Friend, THE AUTHOR.' The letter is not dated; and it is curious to note in this connection that when a short time before his death (which occurred on July 21, 1796), the poet went to Brow, a seaside village on the Solway, where Mrs Riddell was then residing in ill-health, his greeting was, 'Well, madam, have you any commands for the other world?'

The other volumes in this collection comprise An Album for 1791, selected for Robert Riddell of Glenriddell, by his friends at Manchester, in MS.; Allan Ramsay's Poems (1761), with the signatures of Robert Riddell and Eliza Bayley; Boswell's Life of Johnson (1791); Cordiner's Antiquities and Scenery of the North of Scotland (1780); a volume of miscellanies, including articles written by Robert Riddell; and a folio volume of music, partly written and partly printed—altogether as choice a collection as a book-hunter could hope to meet with even in his wildest dreams!

JOHN BURNET OF BARNS.

CHAPTER XV .- THE FIRST MONDAY OF MARCH.



ICOL wakened me before dawn, and I made haste to get ready. I looked to see that my sword was in fit condition, for it was a stout cut-and-thrust blade of the kind which speedily takes the rust.

Then, having taken a draught of strong ale to brace my nerves for the encounter, I left the house and set off with my servant for the college cardens.

Now, from the college gardens there stretches down to the great canal a most beautiful pleasaunce, all set with flower-beds and fountains. Beyond this, again, is a more rugged land, a grove with great patches of grass in it, and here it was that gentlemen of the Scots regiment were wont to settle their differences.

I cannot tell how I felt as I walked through the cool morning air among the young herbs and trees, which still bore the dew upon them. It minded me so keenly of the mornings at home in Tweeddale, when I was used to rise before daylight and go far up Tweed with my rod, and bring back, if my luck were good, great baskets of trout. Now I was bound on a different errand. It was even possible that I might see my own land no more. But this thought I dismissed as unworthy of one who would be thought a cavalier.

In time we came to the spot which the others had fixed on. There I found my man already waiting me; my cousin stripped to his shirt and small-clothes, with his blade glimmering as he felt its edge; his companions muffled up in heavy cloaks and keeping guard over Gilbert's stripped garments. They greeted me shortly as I came up; so without more ado I took off my coat and vest, and gave them into my servant's keeping. Then, going up to my opponent, I took his hand.

'Let there be no malice between us, Gilbert,' said I. 'I was rash maybe, but I am here to give account of my rashness.'

'So be it, cousin,' he said, as he took my hand

We both stepped back a pace and crossed swords, and in a trice we had fallen to.

My first thought, and I am not assumed to confess it, when I felt my steel meet the steel of my foe, was one of arrant and tumultuous fear.

I had never before crossed swords with any one in deadly hatred; and in my case the thing was the harder, for the feeling against my cousin was not so violent a passion as to make me heedless of aught else. But now a feeling which I had not reckoned with came to oppress me—the fear of death. Had my wits been more about me I might have reflected that my cousin was too good a swordsman to kill me and lay himself open to many penalties. But my mind was in such a confusion that I could think of naught but an overwhelming danger.

Howbeit in a little this fit passed, and once more I was myself. Gilbert, for what reason I know not, fenced swiftly and violently. Blow came upon blow till I scarce could keep my breath. I fell at once upon the defensive, and hazarded never a cut, but set all my powers to preserving my skin. And in truth this was no easy task, for he had acquired a villainous trick of passing suddenly from the leg-cut to the headstroke, so that more than once I came not up to guard in time and had his sword almost among my hair. I could not guess what he meant by this strategy, for I had ever believed that a man who began in a hot-fit ended in a languor. He sought, I doubt not, to speedily put an end to the encounter by putting forth his greater strength, hoping to beat down my guard or bewilder me with the multiplicity of his flourishes.

Now, this conduct of my opponent had an effect the very counter of what he proposed. I became completely at my ease; indeed I swear I never felt more cool in my life. This has ever been the way with me, for I have always been at my best in the extremest perils. Oftentimes, when things went very sore with me, I was at a loss and saw no way of escape; but let them get a little worse and I was ready to meet them. So now I was on the watch to frustrate every movement; and since no man can fight rapidly and fight well, I kept him at bay till he deemed it prudent to give up this method.

But now, when he came down to slow, skilful fence, I found my real danger. We were wellmatched, although I was something lighter, he somewhat stronger in the arm and firmer in the body; but taking us all in all we were as nearly equal a pair as might be. And now there was an utter silence; even the birds on the trees seemed to have ceased. The others no longer talked. The sharp clatter and ring of the swords had gone, and in its place was a deadly swish-swish, which every man who has heard it dreads, for it means that each stroke grazes the vitals. I would have given much in that hour for another inch to my arm. I put forth all my skill of fence. All that I had learned from Tam Todd, all that I had found out by my own wits, was present to me; but, try as I would, and I warrant you I tried my utmost, I could not overreach my opponent. Yet I fenced steadily, and, if I made no progress, I did not yield my ground.

With Gilbert the case was otherwise. His play was the most brilliant I had ever seen, full of fantastic feints and flourishes such as is the French fashion. But I could not think that a man could last for ever in this style, since for one stroke of my arm there were two of his, and much leaping from place to place. But beyond doubt he pressed me close. Again and again I felt his steel slipping under my guard, and it was only by a violent parry that I escaped. One stroke had cut open my sleeve and grazed my arm, but beyond this no one of us had suffered hurt.

But soon a thing which I had scarcely foreseen began to daunt me. I was placed facing the east, and the rising sun began to catch my eyes. The ground was my own choosing, so my illluck was my own and no fault of Gilbert's. But it soon began to interfere heavily with my play. I could only stand on guard. I dared not risk a bold stroke, lest, my eyes being dazzled by the light, I should miscalculate the distance. I own I began to feel a spasm of fear. More than one of my opponent's strokes came within perilons nearness. The ground, too, was not firm, and my foot slid once and again when I tried to advance. To add to it all, there was Gilbert's face above the point of the swords, cold, scornful, and triumphant. I began to feel incredibly weak about the small of the back; and I suppose my arm must have wavered, for in guarding a shoulder-cut I dropped my point, and my enemy's blade scratched my left arm just above the elbow. I staggered back with the shock of the blow, and my cousin had a moment's breathing-space. I was so obviously the loser in the game that Gilbert grew merry at my expense.

'Well, John,' he cried, 'does't hurt thee? My arm is somewhat rougher than Marjory's.'

There seems little enough in the words, yet I cannot tell how that taunt angered me. In the mouth of another I had not minded it, but I had a way of growing hot whenever I thought of my cousin and my lady in the same minute of time. It called to my mind a flood of bitter memories. In this encounter, at any rate, it was the saving of me. Once more I was myself, and now I had that overmastering passionate hate which I lacked before. When I crossed swords again I felt no doubt of the issue, and desired only to hasten it. He, on his part, must have seen something in my eyes which he did not like, for he ceased his flourishes and fell on defence.

Then it was that the real combat of the day commenced. Before it had been little more than a trial of skill, now it was a deadly and determined battle. In my state of mind I would have killed my foe with a light heart, however much I might have sorrowed for it after. And now he began to see the folly of his conduct in the fore-

part of the fight. I was still fresh and stout of arm; he was a little weary and his self-confidence a little gone.

'By Heaven, Gilbert, you will eat your words,' I cried, and had at him with might and main.

I fenced as I had never fenced before; not rashly, but persistently, fiercely, cunningly. Every attempt of his I met and foiled. Again and again I was within an ace of putting an end to the thing but for some trifling obstacle which hindered me. He now fought sullenly, with fear in his eyes, for he knew not what I purposed concerning him. I warrant he rued his taunt a hundred times in these brief minutes.

At last my opportunity came. He made a desperate lunge forward, swung half-round, and exposed his right arm. I thrust skilfully and true. Straight through cloth and skin went my blade, and almost ere I knew I had spitted him clean through the arm just above the elbow. The sword dropped from his helpless hand.

I had put forth too much strength; for, as he stumbled back with the shock of the wound, I could not check my course, but staggered heavily against him, and together we rolled on the

In a second I was on my feet and had drawn out my weapon. With lowered point I awaited his rising, for he was now powerless to continue the combat.

'Well,' said I, 'have you had satisfaction?'

He rose to his feet with an ugly smile. 'Sufficient for the present, cousin John,' said he. 'I own you have got the better of me this time.—Hi, Stephen, will you lend me a kerchief to bind this cursed wound?'

One of his companions came up and saw to his wants. I made to go away, for there was no further need of my presence, but my cousin called me back.

'Farewell, John,' he said. 'Let us not part in anger, as before. Parting in anger, they say, means meeting in friendship. And, 'faith, I would rather part from you in all love and meet you next in wrath.'

'Farewell,' I said carelessly as I departed, though I was amazed to hear a man with a pierced arm speak so lightly; courage was not a quality which my cousin had to seek. So I left him in high good-humour with myself, much pleased at my own prowess, and sensible that all immediate annoyance from that quarter was at an end.

Little man knows what God hath prepared for him. Had it not been for his defeat, Gilbert had not left Holland, and my greater misfortunes had never happened. And yet at that hour I rejoiced that I had rid myself of a torment.

Nicol was awaiting me, and soon I was arrayed in my coat once more, for the air was shrewdly cold. My servant was pale as I had never seen him before, and it was clear that he had watched the combat with much foreboding. 'Eh, Maister John,' he cried, 'ye're a braw fechter. I never likit ye half as weel. I thocht a' was ower whiles, but ye aye cam' to yoursel' as sprig as a wull-cat. Ye're maybe a wee thing weak i' the heid-cuts, though,' he added. 'I'll hae to see to ye. It's no' what ye micht ca' profitable to be aye proddin' a man in the wame, for ye may prick him a' ower and him no' muckle the waur. But a guid cleavin' slash on the harns is maist judeecious. It wad kill a stirk.'

It was still early, and we had breakfasted sparely, so we sought a tavern of good repute, 'The Three Crows,' and made a hearty meal. I was so mightily pleased with my victory, like a child with its toy, that I held my head a full inch higher, and would yield the causeway to no man. I do believe if M. Balagny or the great Lord Herbert had challenged me I should not have refused.

Some three days later I had sure tidings that my consin had sailed for Leith, and was thought to have no design of returning.

CHAPTER XVI.-I SPEND MY DAYS IN IDLENESS.

UMMER came on the heels of spring, and the little strip of garden below my windows grew gay as the frock of a burgher's wife on a Sunday. There

were great lines of tulips, purple and red and yellow, stately as kings, erect as a line of soldiers, which extended down the long border night to the edge of the water. The lawn was green and well-trimmed, and shaded by the orderly trees. It was pleasant to sit here in the evenings, when Nicol would bring out the supper-table to the grass, and we would drink our ale while the sun was making all the canal a strip of beaten gold.

The routine of my days was as regular as clockwork, for it was always part of my method to apportion my day equally among my duties. In the morning immediately upon rising I went to Master Sandvoort's lecture on the Latin tongue. Then I broke my fast in the little tavern, 'The Gray Goose,' just at the south entrance to the college. It was a clean, well-fitted place, where were found the fattest landlord and the best ale in Holland. Then at the hour of ten in the forenoon I went to listen to the eloquence of Master Quellinus. Having returned thence to my lodging, I was wont to spend the time till dinner in study. Thereafter I walked in the town, or resorted to the houses of my friends, or read in the garden till maybe four o'clock, when it was my custom to go to the dwelling of Sir William Crichton (him whom I have spoken of before), and there, in the company of such Scots gentlemen as pleased to come, to pass the time very pleasantly. From these meetings I had vast profit, for I learned something of the conduct of affairs and the ways of the world, in the knowledge of which I had still much to seek.

But there were several incidents which befell during this time, and which served to break the monotony of my life, which merit the telling. It was one afternoon as I sat in the arbour that Nicol came across the green followed by an elderly man of grave and comely appearance, in whom to my great joy I recognised my kinsman, Gilbert Burnet of Salisbury. He had alighted in Leyden that morning, and proposed to abide there some days. I would have it that he should put up at my lodgings, and thither he came after many entreaties. During his stay in the city he visited many of the greater folk, for his fame had already gone abroad, and he was welcome everywhere. He was a man of delightful converse; for had he not travelled in many lands and mixed with the most famous? He questioned me as to my progress in letters, and declared himself more than satisfied. 'For, John,' said he, 'I have met many who had greater knowledge, but none of a more refined taste and excellent judgment. Did you decide on the profession of a scholar I think I could promise you a singular success. But indeed it is absurd to think of it; for you, as I take it, are a Burnet and a man of action, and one never to be satisfied with a life of study. I counsel you not to tarry too long in this foreign land, for your country hath sore need of men like you in her present distress.' Then he fell to questioning me as to my opinions on matters political and religious. I told him that I was for the Church and the King to the death, but that I held that the one would be the better of a little moderation in its course, and that the other had fallen into indifferent hands. I told him that it grieved my heart to hear of my own countrymen pursued like partridges on the mountains by some blackguard soldiers, and that when I did return, while deeming it my duty to take the part of the king in all things, I would also think it right to hinder to the best of my power the persecution. In this matter he applauded me. 'What in Heaven's name is all this pother?' he cried. 'Is a man to suffer because he thinks one way of worshipping his God better than another? Rather let us rejoice when he worships Him at all, whether it be at a dyke-side or in the king's chapel.' And indeed in this matter he was of my own way of thinking. When finally he took his leave it was to my great regret, for I found him a man of kindly and sober counsels.

The other matter which I think worth noting was the acquaintance I formed with a Frenchman, one M. de Rohaine, a gentleman of birth, who was in great poverty and abode in a mean street off the Garen Markt. The way in which I first net him was curious. I was coming home late one evening from Master Swinton's house, and in passing through a little alley which leads from near the college to the Garen Markt I was

apprised of some disturbance by a loud noise of tumult. Pushing forward amid a crowd of apprentices and fellows of the baser sort, I saw a little man, maybe a tailor or cobbler from his appearance, with his back against a door and sore pressed by three ruffians, who kept crying out that now they would pay him for his miserly ways. The mob was clearly on their side, for it kept applauding whenever they struck or jostled him. I was just in the act of going forward to put an end to so unequal a combat when a tall, grave man thrust himself out of the throng and cried out in Dutch for them to let go. They answered with some taunt, and almost before I knew he had taken two of the three, one in either hand, and made their heads meet with a sounding crack. I was hugely delighted with the feat, and broke forward to offer my help, for it soon became clear that this champion would have to use all his wits to get out of the place. The three came at him swearing vehemently, and with evil looks in their eyes. He nodded to me as I took my stand at his side.

'Look after the red-beard, friend,' he cried. 'I will take the other two.'

And then I found my hands full indeed, for my opponent was tough and active, and cared nothing for the rules of honourable warfare. In the end, however, my training got the mastery, and I pinked him very prettily in the right leg, and so put him out of the fight. Then I had time to turn to the others, and here I found my new-found comrade sore bested. He had an ugly cut in his forehead, whence a trickle of blood crawled over his face. But his foes were in a worse case still; and when word came at the moment that a body of the guard was coming they made off with all speed.

The man turned and offered me his hand.

'Let me thank you, sir, whoever you may be,' said he. 'I am the Sieur de Rohaine, at your service.'

'And I am Master John Burnet of Barns in Scotland,' said I.

'What!' he cried, 'a Scot?' And nothing would serve him but that I must come with him to his lodging and join him at supper. For, as it seemed, he himself had just come from Scotland, and was full of memories of the land.

From him I learned something more of the condition of my own land, and it was worse even than I had feared. M. de Rohaine had had many strange adventures in it, but he seemed to shrink from speaking of himself and his own affairs. There was in his eyes a look of fixed melancholy, as of one who had encountered much sorrow in his time and had little hope for more happiness in the world. Yet withal he was so gracious and noble in presence that I felt I was in the company of a man indeed.

If I were to tell all the benefit I derived from this man I should fill a volume and never reach the end of my tale. Suffice it to say that from him I learned many of the tricks of sword-play, so that soon I became as nigh perfect in the art as it was ever in my power to be. I was scarce ever out of his company, until one day he received a letter from a kinsman bidding him return on urgent necessity. He made his farewells to me with great regret, and on parting bade me count on his aid if I should ever need it. From that day to this I have never cast eyes on his face or heard tidings of him, but I herewith charge all folk of my family who may read this tale, if ever it be their fortune to meet with one of his name or race, that they befriend him to the best of their power, seeing that he did much kindness to me.

In all this time I had had many letters from Marjory, letters writ in a cheerful, pleasant tone, praying indeed for my return, but in no wise complaining of my absence. I looked eagerly for the coming of these letters, for my heart was ever at Dawyck; and though I much enjoyed my sojourning in Holland, I was yet glad and willing for the time of departure to arrive. In January of the next year I received a bundle of news written in the gayest of spirits; but after that for three months and more I heard nothing. From this long silence I had much food for anxiety; for though I wrote, I am sure, some half-dozen times, no reply ever came. The uneasiness into which this put me cast something of a gloom over the latter part of the winter. I invented a hundred reasons to explain it. Marjory might be ill; the letters might have gone astray; perhaps she had naught to tell me. But I could not satisfy myself with these excuses, so I had e'en to wait the issue of events.

It was not till the month of April that I had news from my love, and what this was I shall hasten to tell.

(To be continued.)

THE CAPE GOVERNMENT RAILWAYS.



T a recent meeting of the Royal Colonial Institute, Earl Grey said he doubted whether there were many questions in the whole circle of politics more important at present than those in connection

with the extension, consolidation, and improvement of railways in South Africa; and a member of the House of Commons present at the opening of the line to Buluwayo (or Bulawayo) in November, a line piercing 1360 miles into the recesses of the Dark Continent, avowed that he had never before realised the greatness of Britain's destiny in Africa.

The success of the Cape government railways may be characterised as almost phenomenal, considering that every ounce of material for the iron road has had to be transported 6000 miles, and in view of the many natural obstacles that have had to be overcome in the matter of construction. In view of the vast future possibilities which are being opened up, no less than the present material prosperity in course of development, and the numbers of men who are attracted to the service from the mother-country and elsewhere, a few jottings by a railway hand, who for thirty years past has made the Cape of Good Hope his home, may not be uninteresting or uninstructive.

When the writer landed at Capetown in the year 1865, the entire system comprised a private line to Wellington, forty-five miles in length, with a short branch of eight miles to the suburb of Wynberg; to-day the government has under its control and administration over 2000 miles, representing a capital of something like twenty-

two millions sterling, showing an interest - return of close upon nine per cent. The small and insignificant-looking corrugated-iron shed which in the early days did duty as a passenger and goods terminus in Capetown has been supplanted by a palatial pile of buildings, forming one of the architectural features of the city; but every day emphasises the fact that even the latter is too limited, and plans are now in hand for very large extension. Standing on one of the platforms awaiting the departure of the nine o'clock P.M. train for the North, one has difficulty in realising that one is 6000 miles from the hub of the universe; and, were it not for the coloured faces, you might by no great effort of imagination almost fancy yourself at Charing Cross or Victoria. The handsomely upholstered, electrically lit, and well-appointed saloon coaches, the travelling post-office with its busy staff of sorters, and all the various concomitants of railway economy, cannot fail to impress the spectator, and convince him of the rapid march of progress in the southern hemisphere. All sorts and conditions of men are in evidence-black, white, and gray, Kaffirs, Malays, and Europeans. Paupers mingle with millionaires; there are numbers of young fellows just fresh from home, full of life and vigour, bent on trying their luck in the domain of gold and diamonds; and weary invalids searching for health. which they are sanguine of attaining in the dry, bracing uplands of the North. Night after night, year in and year out, there is the same busy scene of animation and excitement. Indeed the authorities, in view of the large congregation of idlers and loungers 'to see the train off,' have

imposed a charge of threepence upon every person not an actual passenger going on to the platform; but even this restriction does not seem to diminish the crowd.

When one steps ashore at the commodious and extensive docks in Table Bay from one of the 'Castle' or 'Union' liners plying every week between England and the Cape, arrangements can be made for the through booking and registration of baggage to any part of South Africa; and the traveller, thus relieved of all worry and anxiety, can hail a hansom, and in five minutes be driven to the railway station, whence two trains a day, morning and evening, depart for Kimberley, Johannesburg, and Buluwayo, which last-named place, by the way, only a few years ago was the kraal of a merciless and bloodthirsty savage despot. It seems almost like a romance; but there is more to follow, and many now living may very likely yet see the day when it will be possible to go by rail from Capetown to Cairo.

One can travel on the Cape government railways either first, second, or third class according to the length of his purse; third class is about a penny a mile, and the others in proportion. A reliable and experienced conductor is in attendance on each train, and passengers are supplied with meals on board at a fixed charge of half-a-crown each, and with light refreshments at moderate charges. add to the comforts of travelling, bedding, consisting of mattress, blankets, sheet, and pillow, is supplied at a small extra charge; indeed no trouble or expense is spared to render the journey as agreeable as possible. Many improvements are being made at the various refreshment rooms along the lines, and the tariff of charges is one of the subjects of official control, which prevents anything like

With so large a mileage, and with a large increase in the number of trains running, it cannot be expected that there should be immunity from accidents; but these are few and far between, and the provision of the tablet system, which it is proposed shortly to bring into operation, will be an additional safeguard. During 1896 there were only thirtyfour deaths from train casualties, and of this number eight occurred to railway employés. A very large proportion of the line is fenced in on both sides, and the government offers special facilities to farmers living adjacent to the track who are desirous of having their lands enclosed, so as to prevent their cattle straying and being run over and destroyed.

Railways and public works in the Cape Colony constitute a ministerial department, of which the Hon. Sir J. Sivewright, K.C.M.G., is the present commissioner; the more im-

mediate details of working, however, are in the hands of a general manager, who has held the post for about seventeen years past, and has acquitted himself in a manner satisfactory alike to the government and the public generally. He is assisted by a chief traffic manager, engineer - in - chief, chief locomotive superintendent, and accounting officer, each head having in turn his respective staff. The heads of departments meet the general manager periodically for the purposes of mutual consultation and advice in regard to matters affecting working and maintenance. Larger questions of general policy are practically vested in the ministry of the day. The advantages of state as compared with joint-stock railways may be open to debate; but this much is certain, that the Cape railways are worked smoothly and efficiently; one hears comparatively very little dissatisfaction on the part of the public, while the financial results are all that could be desired. For instance, the revenue which in 1887 amounted to £1,200,000 rose in 1896 to £4,100,000. In 1887 the number of passengers conveyed was 2,200,000; in 1896 the number was 8,000,000. The tonnage of goods carried was, in 1887, 350,000; in 1896 it was 1,350,000. Figures such as these are very striking as showing the wonderful increase of traffic, and abundantly justify the prosecution of railway enterprise in the country.

So far as internal economy is concerned, the railways being owned by the government, the officers and employés, with the exception of daily - paid men, constitute part of the colonial civil service, and enjoy all the privileges attaching thereto. At the age of sixty, for instance (and in the case of engine-drivers at fifty), a man can retire on a pension equal to one-sixtieth of his salary for every year of service. For a payment of two shillings a month, every member of the staff, from the general manager to a carriagecleaner, can have medical attendance with medicine for not only himself but his family, however numerous. The holiday arrangements are also on a fairly liberal scale; and if a man allows his annual leave to accumulate he can, after a specified time, proceed to Europe for six months, three on full and three on half-pay, A good number avail themselves of this privilege, as the rate of salary paid is sufficient to enable those of a thrifty disposition to lay by after a few years' work sufficient to enable them to renew acquaintance with friends and relatives in the old country.

The education of railway children, very many of whom of necessity live far removed from the centres of civilisation, has lately received a good deal of attention at the hands of the government, and a railway education officer has been appointed, whose duty it is to attend to railway schools, reorganising where necessary those already in existence, and starting fresh

schools where practicable. There is also a railway training-office, which is largely made use of by young men anxious to qualify themselves for appointments; classes for the acquisition of shorthand and typewriting are also held. Lads on entering the service receive £4 a month; but if they show any aptitude and ability they are soon pushed ahead, as, with the largely increasing traffic and the frequent opening up of new sections, chances of promotion are always occurring. At the same time, men from the mother-country with good railway experience are almost sure of being taken on when they apply, especially in the traffic department; and the writer knows many who in England or Scotland received a bare pittance, but are now enjoying substantial salaries with the additional advantage of easier hours and speedier prospects of promotion. In this connection I cannot do better than conclude by quoting from the last report of the general manager: 'While good work is done in the training - office, it cannot be expected that the short training the men receive can qualify them for all the varied work that railway men have to apply themselves to; but the demand for men has been so great that we have often been compelled to employ young men before they were duly qualified for their appointments. The same difficulty has been experienced in other branches of the service; and it is a matter of surprise that the demand for men of all descriptions should have been so great during the last two or three

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CHAPTER IV.-1897.



HE new year was two months old, and the outlook at the head of the Bonanza was a desperate one. In some respects the time had passed more tolerably than the previous year, for Twilight Ben had become

humanised, if not Christianised, and proved himself more sociable. Besides, he had fallen in love at second-hand with little 'Linda, and Jim wasn't a bit jealous.

'Say, pard,' he would observe, filling his pipe and squatting on his heels, with his back against the logs of the hut, 'jest toot us a yarn 'bout this yer little schule-marm of yourn over yander at the spellin'-schule in Kansas.'

Then Jim, nothing loth, would enthusiastically sing her praises again and again. And so passed many a pleasant hour of well-carned leisure, and it was a better tonic to Jim than all the physic

in a drug-store. They had, too, the satisfaction of being pretty certain that they had a valuable dump ready for cleaning-up. And yet, otherwise, things had gone badly with them. On those awful, snow-clad heights that hemmed in the little straggling camp game there was practically none. Once the pair had, with the occupants of the nearest claim below, caught a moose and shared the spoils, and twice Twilight Ben had shot a fox. That was all that had come in their way to swell the larder, and now starvation stared them in the face. Already men in the creek had died from hunger, and food was not to be had for love or gold. A handful of beans, a meagre chunk of rancid bacon, and a few pounds of flour were all that remained; and it was hopeless to expect fresh supplies up the river by steamer before the end of June. True, a pack-train might possibly before ! that reach them, or, as soon as the journey to Forty Mile City was practicable, a bare subsistence might perhaps be had at an enormous price; but, at the best, a couple of months must elapse before they could hope for relief, and there was barely provision to keep body and soul together for one month.

Moodily they sat in their lonely cabin and discussed the situation; or, at least, Jim discussed it, while his chum sat silently smoking. Walled up in a living grave, helpless in that dark solitude—helpless, and yet treading upon riches that in almost any other part of the world would have procured them every earthly comfort—it was hard to die. And to die, too, without another sight of 'Linda. It was a thousand tortures.

'Linda! 'Linda!' he wailed pitifully, and buried his face in his hands.

For five minutes a ghastly silence reigned in the hut, and neither of the men gave sign or motion. Then, knocking the ashes from his pipe, Twilight Ben rose to his feet, and observed in a casual tone:

'Say, pard, this yer's bed-rock. I calkerlate I'll jest prospect round and shoot suthin' to make the pervisions hold out a spell longer.'

Jim heard him only mechanically, and took no notice of him as he left the hut. The next instant a sharp report drove the words home to his absent brain, and he sprang excitedly through the door into the open. Twilight Ben had shot something. Over the terrible ice-bound heights the Northern Lights flashed and flamed in the heavens, lighting up that snow-whited sepulchre with their weird, fitful radiance. And in the foreground, revolver still in hand and finger on the trigger, lay Twilight Ben with a bullet-hole through his chest.

With one bound Jim was on his knees by the

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prostrate man's side, but he could do no good. The life was fast oozing away. He held the dying man's hand in his, and felt his grip returned with a feeble pressure of the horny fingers. For a moment the old sinner's eyes opened, and a smile passed over his face—a smile that almost transformed his ugly features—as he whispered:

'Say, pard, I calkerlate I've shot suthin' that'll help you hold out till supplies come in. I'm going —over yander now. Give my—respec's—to—the—little—schule-marm—and—and'——

And Twilight Ben had gone 'over yander.'

The summer was nearly over, and the woodbine on the walls of the log schoolhouse at Oloville was beginning to turn crimson. Inside, 'Linda was for the fifth time that week giving the children a lesson in geography. Somehow, during the past two years, those children had had a lot of geography lessons. Say what you will to the contrary, the world is a big place, and there is a lot of geography in it. And as it is generally admitted that it is far better to know one branch of a science, and know it well, than to skip hurriedly over the whole superficial surface of it and understand little or nothing of it at the finish, 'Linda had directed the attention of her youthful students towards Alaska and the neighbouring districts of British Columbia; so that, after two years of careful attention to that locality, they were getting to know it pretty well, and were nearly ready to turn to some other less important part of the globe.

The dainty little school-marm was a trifle thinner than she was on that other afternoon that seemed so long ago; and she was more staid. She had been paler, too, during those two long, weary years—pale with anxiety for him who was away groping for gold in the northern night. But now a bright flush had come back to her cheeks ever since—just a fortnight previously—that letter had come which now lay hidden away in the bosom of her dress, nearest to her heart, which it had instantly warmed into a fever of joyful expectancy. Jim was coming home! There was a wistful gleam of hungry love in her dark-blue eyes, and little 'Linda looked more bewitching than ever.

The geography lesson ended, as it usually did, on a now famous tributary of the river Yukon; school was over for the day, and, as the children rushed out of the door, a stranger who was approaching it was all but overwhelmed in the human avalanche. For a moment the youngsters stopped and stared curiously at him, but it was nobody they recognised, and they quickly sped away.

The westering sun threw a long shadow on the schoolhouse floor as the stranger paused within the doorway. 'Linda stopped with a sudden start in her task of gathering up the slates and exercise-books, and a wild hope set her heart thumping madly. She leaned, trembling violently, against

a desk for support, afraid to look up lest the new-comer should not be him. And still the stranger paused, speechless, upon the threshold. 'Linda, with one hand pressed tightly on her breast, was struggling to brace herself against possible disappointment. At last she raised her eyes and turned them towards the door. The tension of the moment was over, and yet the reaction was cruel-terribly cruel. Her heart sank with a sickening sensation, and all the hot blood fled from her face and neck in icy streams that chilled her, as she found herself face to face with the unfamiliar and unknown. Vaguely she wondered what could be his business here. What did he want with her?-he, this unknown old man, with the white hair and the long beard streaked with silver sweeping his bosom, and the big hollow eyes that frightened her with their hungry stare, and the bowed shoulders, and the sunken, haggard cheeks, and the pinched nose, and the starved cheek-bones that seemed trying to burst through the tight-drawn, dried-up skin. For a minute they stood looking at one another—these two. Then the unknown spoke, and it was in an unknown voice, for in a hoarse, cracked, rattling tone came the one word:

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"Linda!"

For a second the little school-marm's heart stood still, as she gasped for breath, and her legs shook violently under her.

'Linda—little 'Linda! it's me—Jim!' he went on, in the same hoarse, decrepit voice, and he stretched out his arms entreatingly.

Yet she only shrank, shivering, from him, and continued to stare at him with unconcealed terror in her dilated eyes.

'Sweetheart, I guess this hes come too suddentlike on you, pore lamb!' Jim said, with something in his throat that broke up his words into queer little husky quavers. 'You don't jest realise yet that it's me—come back with enough gold to make you comfortable fur life. Yas, shore enough, it's me, 'Linda—Jim—yo'r Jim!' and, carried away by his emotion, he made a step towards her.

'No, no!' she cried hastily, as, flinging up her arms before her as though to ward off a dreaded blow, she retreated from him. 'Don't touch me! I can't bear it! Go! Leave me alone! You frighten me. Have mercy on me! Go away—go—go! It's not my Jim—not my Jim!' she wailed piteously.

'Gosh!' Jim sighed wearily to himself, as a new light broke cruelly upon him and froze up every morsel of hope in his breast; 'I reckon I'm beginning to git the hang of things. Wall, I allus allowed she was too good fur me, so that I couldn't hardly ever believe she could ever be mine. And so I reckon I oughter be resigned; but it's powerful hard—powerful hard. And yit the Lord was very good to me to give me her love even fur a little while. Yit it's powerful hard—powerful hard. Pore little 'Linda!'

With a dazed stare the little school-marm watched him limp slowly from the room without another word, saw his bowed head pass the window; and then she sank on the

floor, and quietly fainted away.

Later, 'Linda tossed restlessly upon her bed in the gable-room at Eben Hutchin's. Mechanically she heard the clock in the parlour below strike ten and eleven. Her eyes ached with staring at the darkness, and yet no sleep came to close the weary eyelids. Her heart ached with straining for her Jim—the other Jim—the one who had gone away and carried all her love with him; not this Jim whom she could not recognise—and yet no peace came to soothe the gnawing pain. And all she could do was to moan dismally:

'I have no Jim now. It is not my Jim.

My love is dead-dead !'

The clock in the parlour below struck twelve, and 'Linda sprang off the bed. If she lay there any longer, alone in the darkness with that tormenting nightmare, she would go mad. Besides, the atmosphere in the room was stifling. She could not breathe. She moved across to the window to let in the cool night air; and, as she drew aside the curtains and looked out, a light suddenly flickered in the darkness, and went out. It flickered again and burned into a steady light that shone from a window across the way and a little lower down the road. She watched it absently. Twice a shadow passed between the light and the window. Then she recollected. It was the schoolhouse window she was looking at, and somebody was in the schoolhouse! The door, she knew, she had locked. Could burglars have -- But no: there was nothing of value in the place to tempt thieves. Who else could be there at this time of night? There was only one conclusion her wearied brain could come to-it must be Ji-No, no! there was no Jim for her now! It must be the man-the unknown Jim who had terrified her so. What could he be doing in the schoolhouse?

The minutes dragged by slowly until half-an-hour had passed. And still she watched; and still the light streamed steadily from the schoolhouse window. The shadow once more came betwixt the light and the window, and the next instant the light went out. She strained her eyes; but all was black, and only to her quick ears came the sound of the window being gently closed. Next she heard the sound of footsteps on the road, footsteps that slowly got fainter and fainter until they died away in the distance down the grade.

Hastily dressing herself in the dark, she put on her hat, let herself quietly out of the house, and hurried across in her slippers to the schoolhouse. The door was still locked. With her key she opened it, passed inside, and

lighted the lamp. All was as she had left it, save that the window was unfastened and a splinter had been broken from the sash where it had been forced open—and—yes—there was a small package on her desk, tied up and addressed to her. The writing was terribly shaky, and yet there was something of Jim's hand in it—the old Jim's. Breathlessly she cut the string, and tore it open, and as she did so a bundle of bank-notes fell upon the desk. She took no heed of them, for she had a letter in her hand; and as she read it the scales fell from her dazed eyes and she saw clearly.

The letter was simple and straightforward. The writer had not dared to use affectionate epithets, lest he should betray the anguish he was struggling manfully to strangle. The letter

simply ran:

'You are right. I don't blame you. I can see it all now, and for your sake I thank Heaven that you found out before it was too late that you were not made for the likes of me. You tried to love me I know, but you just couldn't do it. It warn't likely. I ought to have knowed that, and stood out of the way for some other fellow who was more your equal, and could have made you happy. I'm going away now, so that the sight of me won't ever pain or annoy you again. But before I start I have got a kind of trust to close. Afore I set out for Alaska, I just settled one thing in my mind, and I solemnly vowed, "Come rain or come shine, what gold the Lord puts into my hand this trip is 'Linda's-every cent of it." You will find it all in this package-forty-three thousand dollars I took out of the Bonanza and fifteen thousand I sold the claim for-in notes on the Union Bank, 'Frisco, for fifty-eight thousand dollars. There was a matter of a few odd dollars besides that I have taken the liberty of keeping for present expenses until I get a job, knowing that you would not grudge them me. When you read this I shall be far away. Try to think kindly of me sometimes. God keep and prosper you all the days of your life. 'JAMES VICKERSON.'

With flaming cheeks and heaving breast, she read it through to the end. Then she pressed the writing wildly to her lips, and held it tightly to her breast. Passionately she cried and laughed and laughed and cried—cried for shame and laughed for joy. A hundred times she kissed the letter, and her scalding tears ran down on to it and blurred the writing. And all the time, between her sobs and laughter, she was crying over and over again:

'It is my Jim—my Jim! Oh, how heartless and wicked I must have seemed! And yet my heart was his—every bit his—all the time; but it didn't recognise him till now. Yes, it's my Jim—the same old, dear Honest Jim—and I was

blind and couldn't see him!'

'LINDA. 203

Soon an awful fear crept over her. Had she found her Jim only to lose him again? 'When you read this I shall be far away' he had written. He had not thought she would read it until school-time. He must be going away by the night train. The cars came through Oloville at two o'clock. She gave one hurried glance at the clock. It was then a quarter to two, and the depôt was a mile and a-half away. Her heart sank. Stop! There was just one hope. The cars might be late. Leaving the bank-notes strewed upon the desk, but still clasping in her fingers that precious letter, she turned out the lamp, and flew out into the night.

Stumbling and slipping in the darkness, she sped down the grade at her utmost pace. Thorns by the wayside caught and tore her dress, and still she flew onward. Her hat vanished in the gloom and her hair streamed out behind her blacker than the night, but she never halted a second. Soon an ugly stone in her way wrenched off one slipper, yet she never paused—at least not longer than to kick off the other one, which now incommoded her running. She was getting nearer the depôt. She could see the signal light. The loose stones on the track cut through her stockings and bruised her feet; yet she never even felt them, for in the distance she could hear the rumble

of the approaching cars as they thundered down the grade from Dipsburgh. She could see the lights of the train now, creeping swifter and swifter over the prairie. It was a race for life-for love. Her stockings hung in rags about her bleeding feet as she strove every nerve to increase her speed. Once she tripped over a loose shingle lying in the road, and fell heavily, cutting her hands badly on the track. In a second she was up again, and flying on. She could hear the engineer clap on the brakes as the cars began to slow down into the depôt that was still fifty yards ahead. One last wild, frantic effort, and she bounded on to the platform as the solitary passenger, with one hand on the handle, was about to step into the car. A dart-a spring! and she had caught him by the arm and dragged him back.
'Jim—Jim!' she gasped wildly, as she struggled

'Jim—Jim!' she gasped wildly, as she struggled fiercely for breath. 'Take me back again, Jim!—my Jim!—my Jim! I was blind—cruel—unworthy, but never false. Take me back, Jim! Let me be your servant—slave—dog! but take me back!'

And, as the cars rolled out into the night, Jim took her—bleeding, weeping, tattered, and dishevelled—into his arms and held her tightly to his breast. But he could not take her back to his heart, for she had never left it.

THE MONTH: SCIENCE AND ARTS.

SUBMARINE NAVIGATION.



HE ideas so cleverly worked out in Jules Verne's romance, Twenty Thousand Leagues under the Sea, are at last realised to a considerable extent by a vessel called Accordant, which is the invention

Argonaut, which is the invention of Mr Simon Lake of Baltimore. This submarine boat is not intended for purposes of warfare, although, no doubt, it will point the way to some offensive weapon of the same nature. It is intended for the salvage of wrecks, and will carry a crew of divers, who will be able, like those described by Jules Verne, to leave the vessel when necessary to work on the sea-bottom. This submarine boat is cylindrical in form, each end being pointed like a cigar. At the top is a conning-tower for the pilot, and at the prow is a powerful electric searchlight. The propeller is driven by a gasoline engine at the rate of about tive miles an hour on the surface, and much faster when the vessel is submerged. The boat has four wheels upon which it can creep along the bottom, the engine-power being shunted from the propeller to these wheels when occasion arises. But the most important fact with regard to the new submarine vessel is that it has been through a successful trial lasting two hours, during which time the crew suffered no harm from being shut out of all communication with the outer air.

SANITATION IN LONDON.

In his new-year's address as president of the Sanitary Inspectors' Association, Sir John Hutton gave a very interesting account of the manner in which sanitary progress in the metropolis had influenced the death-rate. He said that the aim and the result of his association were to promote longevity; and so far they had been most successful. Looking back a couple of centuries, he found that the death-rate in London in the year 1660 was no less than 80 per 1000—in 1896 it was only 18.9. This was a remarkable contrast, especially when he considered the increased number of houses and the density of the population. At the beginning of the present century London had 142,042 houses, in 1831 the number had swollen to more than a quarter of a million, and this had increased in 1896 to 596,030. With regard to increase in the metropolitan population, the numbers living in London were less than a million in 1801, but in 1896 they had increased to nearly four and a half millions. He warned his hearers that the water question should be seen to in the near future, and urged them to protest against the present happy-go-lucky policy of dealing with the water-supply. The late epidemic of typhoid at Maidstone was a lesson which Londoners could not afford to ignore.

CEMENT PIPES.

Pipes for the carriage of water have from time to time been made of all kinds of materials, from the hollowed tree-trunks which are occasionally unearthed in our cities, to the paper contrivances soaked in pitch which have been recommended as efficient in more modern times. A Frenchman has recently invented a novel form of pipe which should be valuable for drainage and other purposes. A trench is dug in the ground where the pipe is required to be laid, and is partly filled in with good cement. Upon this soft substratum is laid a rubber tube covered with canvas and tightly inflated with air. The trench is now filled up with cement, so that the tube is completely covered with an inch or more of the plastic material. As soon as the cement sets, the air is let out of the tube, and it is easily extracted from the pipe of which it for a time formed the core. The tube can then be again inflated to serve for a fresh section of the pipe, which can be as much as six inches in diameter if required. It is said that a cement pipe of this thickness has been successfully laid by the new method at a cost of about one shilling per yard.

A NEW LIFE-BELT.

Swimmers are generally very suspicious with regard to life-belts, for unless these contrivances are well made and properly adjusted they are positively dangerous in use. Some are so bulky that they impede all action. This defect certainly applies to the cork waistcoats adopted by the National Lifeboat Institution, and it will be remembered that in the recent fatal capsizing of a lifeboat at Margate the men had not donned their corks on this very ground. A new kind of belt-known as the Louiton Float-is described and illustrated in a French journal; and it has the appearance of a conger eel with conical ends. Made of sheet rubber, it passes round the neck, across the chest, and round the waist, and can be inflated in one minute by the mouth; and its weight is about one pound. This life-belt or float is flexible, light, and easily placed in position. It can be worn without inconvenience, and is designed among other purposes for the use of swimming schools.

THE TRANSPORT OF LIVING FISH.

Those who have had the opportunity of tasting fish which the cook has been able to get direct from the sea know well what a contrast the food affords to fish which has gone the usual round of markets and shops. A fresh herring, for example, cooked under such conditions is a most delicious

morsel. Mr F. G. Maardt, a Danish engineer, recognising the advantage of supplying consumers with fresh fish, has patented an apparatus by which the creatures can be conveyed by rail for any reasonable distance in a live state. This apparatus is fitted to an ordinary railway truck, and consists of a tank of sea-water divided by a partition in such a way that the water, actuated and aerated by pumps, is kept in constant circulation. The fish contained in the tank cannot rest, but have to stem the strong current in the tank, the pumps being worked by a small steam-engine. In a tank capable of holding two thousand pounds of fish, the water will pass through five times in the course of an hour; and although it is stated that the water is re-oxygenised in the process, the means whereby this is done are not detailed. At a recent trial of the apparatus sixteen hundred pounds of fish were kept alive for eight days, although previously they had been kept for three days in ordinary salt-water boxes in the harbour at Frederikshavn. The cost of preserving fish in this manner is said to come to less than one farthing per pound, presumably for each day during which the apparatus is at work.

A NEW MAGAZINE-RIFLE.

There is no finality in the weapons of war: we are constantly finding out improved methods of slaughtering our fellow-creatures. For a long time it was considered that the Martini-Henry rifle performed this work to perfection, until it was discovered that more men could be killed in a given time by the Lee-Metford-the weapon which has now been adopted by the British army. Lately, however, an inventor, who hails from Victoria, in the person of Mr T. R. R. Ashton, has brought forward a rifle which, in competition with the two weapons already named, leaves them far behind in point of weight, speed of firing, and accuracy. The new weapon is at the same time more simple in construction than the others, comprising a less number of parts, and can be more easily cleaned. The Ashton rifle has been submitted to the British War Office, and may supersede the Lee-Metford if the tests here corroborate those which have been made in Australia.

THE THAMES A SALMON RIVER.

Less than a century ago the king of fishes, the salmon, was found in the river Thames; and there is evidence to show that in earlier times it was common in that stream. Since then Father Thames has been badly treated; about thirty years back the water became so charged with sewage and the refuse of factories that it was poisonous not only to fish but to the dwellers on its banks. The upper Thames remained clean, it is true; but this was of no moment to the salmon, whose instincts make them visit the sea at stated

So the fish ceased to appear in the metropolitan river. With improved methods of dealing with the sewage, and by the aid of stringent laws against other sources of pollution, the Thames is now comparatively clean once more; and it is believed that the salmon could now live in its waters. An association has therefore been formed to ascertain experimentally whether this is the case; and it is suggested that some two-year-old smolts should be introduced into the upper waters of the river in order to see whether in a few months' time they have made their way to the sea and returned as grilse. Should this be found to be the case, the river would be stocked on a larger scale, and the Thames might once more teem with salmon, as it is said to have done in the past.

THE NEXT POLAR EXPEDITION.

The one great ambition of Lieutenant Peary is to reach the North Pole; and in July next he will start upon that hazardous enterprise. As our readers well know, Lieutenant Peary is no stranger to arctic exploration, and during the past six years he has been the leader of a series of expeditions to Greenland which have accomplished good work. He has thus had plenty of opportunity of thinking out the best method of reaching the Pole, and his plans are now matured. He will first advance to Sherard Osborn Fjörd with a very small crew, but he will pick up on his way several Eskimo whom he has already engaged for the expedition. Here the men and stores will be landed, and the ship will return. From this base he will attempt to cross the sea to the Pole, and will try again and again to accomplish the journey should he not at first succeed. He thinks that possibly there may be islands between Greenland and the Pole, in which case one of these would serve as an advanced base of operations. Each succeeding summer the ship will do its best to reach the original base, so that the brave sledging party will be to some extent in touch with the outer world.

RARE BUTTERFLIES.

In a recent number of the Scientific American Mr G. E. Walsh gives some interesting particulars with reference to the capture and cost of rare butterflies in different parts of the world. Some of these insects will fetch the most extraordinary prices, and therefore hunters will run into all kinds of danger in the hope of securing them. It is said, too, that unscrupulous traders will resort to fraud in order to palm off bogus specimens upon the unwary, actually going so far as to dye ordinary varieties, and to make up unique specimens by borrowing the wings from two or three kinds of butterflies. It is said that London firms employ travelling entomologists in every part of the globe, and more especially in out-of-the-way districts far from civilisation. These men go into

the great tropical forests, and carry their lives in their hands. They generally unite butterfly-catching with orchid and lizard-hunting, and will carry implements for the capture of all three. Some of the butterflies will flit about the tops of high trees, and much dangerous climbing has to be done to get near them. Others are captured by the aid of decoys-either butterflies of the same species or bits of coloured cloth; others again are snared by sugaring the tree-trunks. The captured butterfly is dropped into a poison bottle, where it quickly dies; and, when opportunity offers, its stiffness is relaxed by its being placed in a box with damp flannel, after which it can be mounted with wings extended, in order to show its beauties to the best advantage. Some collections of these beautiful objects there are which are valued at many thousands of pounds.

AN ALUMINIUM BALLOON.

The metal aluminium has now become so cheap that it is constantly employed where extreme lightness is required; but few would have chosen it as the material for the envelope of a balloon. But a balloon of this character, cigar-shaped, with a body measuring one hundred and thirty-four feet long by forty-six feet in diameter, has been made and tried with sufficient success to make a repetition of the experiment desirable. The inventor was Herr Schwarz of Agram, who died, unfortunately, just before the day of the experimental ascent-November 3. This ascent took place under the auspices of the Royal Prussian Aërial Navigation Department; and it is to be regretted that the officers were under the mistaken impression that the new balloon was too heavy to rise, and stripped the machine of certain appliances, the absence of which eventually led to disaster. One of these was a device for keeping the belt of the engine in place, and another a contrivance to receive the shock on rapid descent to the ground. The balloon went up and attained a good speed; but suddenly the belting slipped, the aeronaut lost his presence of mind, opened the valve, and down came the machine with a force which wrecked it. Another air-ship on the same lines is now to be built under official protection.

HOME-MADE SODA-WATER.

Soda-water, usually consisting of water charged with carbonic acid gas and quite innocent of soda, is such a favourite beverage that a method by which the consumer can compound it for himself is a matter of some interest. Carbonic acid, or—to give it its more modern name—carbon dioxide, assumes a liquid form under comparatively low pressure. In this form it is, for this purpose, contained in steel cylindrical shells, which are about one inch in length and look somewhat like rifle-bullets. These shells, charged with liquid carbon dioxide, will presently be procur-

able, we understand, at the price of about one penny each. One of these is dropped into a special form of bottle which has been previously filled with plain water; and the insertion of a screw stopper, while it closes the vessel, releases the liquefied gas from the shell, which quickly permeates the water and changes it into an effervescing beverage. It is obvious that, instead of plain water, sweetened and flavoured liquids can be employed, or still wines may be changed to sparkling ones. Possibly it has occurred to the manufacturers that hand-grenades on the same principle would be invaluable in coping with an outbreak of fire, for carbon dioxide is a most deadly enemy to combustion, and if quickly applied at the initial stages of a fire might be of much greater service than half-a-dozen steam fire-engines ten minutes later.

THE STORAGE OF FLOUR.

Our military and naval authorities are now submitting to careful test a system of flour storage from which great results are anticipated. It is an old idea to establish national granaries to hold reserves of wheat in case war should shut us out from our usual sources of foreign supply. But great difficulties come in the way of the accomplishment of such a scheme; the grain being, for one thing, liable to germinate and become utterly useless. In a word, grain cannot be kept in good condition in large quantities for any length of time. The new suggestion, now being tested under different climatic conditions, is to take flour, not grain, and to compress it under hydraulic agency into solid blocks or It is found that such blocks are not assailable by damp, that the heavy pressure destroys all forms of larval life, and that the product is safe from the attacks of insects. Moreover, the bulk of the flour by this treatment is reduced so much that three hundred pounds can be stored in the space which would be filled by one hundred pounds of loose flour. Should this interesting experiment prove to be successful, the system will, as a matter of course, be extended to the handling and sale of flour generally, to the convenience and profit of traders and consumers alike.

A GUN WHICH TAKES TO PIECES.

The transport of heavy ordnance from place to place is one of the most serious difficulties which military authorities have to face, especially when the work has to be accomplished in out-of-the-way districts destitute of railways or roads. For mountain warfare a gun of small calibre has for many years been in use, which can be unscrewed into two pieces for ease of transport by two camels or other available animals, and rapidly put together when required for use; but no attempt has hitherto been made to construct large weapons on the same lines. Mr E. J. Blood

of Chicago has, however, now invented a method of building up ordnance in sections, which, should it bear the necessary tests as to stability, &c., will be most valuable in placing guns of heavy calibre in situations which under present conditions could not possibly be defended with such weapons. The new guns are built up of a number of rolled sheet-steel discs, held together between thick plates or cross-heads by steel tierods. The breech part of the gun is further strengthened by bolts carried through holes in the discs forming that portion of the weapon. Such a gun could be carried piecemeal by packanimals, even by porterage, to its destination, and there screwed together by the nuts, tie-rods, and bolts which form an essential feature of its design. The other advantages claimed for this method of construction are that it ensures thorough inspection and ready detection of flaws in the metal at every part, that the time of construction is greatly reduced from the fact that the different parts can be distributed among many workshops, and that the inner barrel can be readily removed and another put in its place in case of corresion or other accidents.

TO THE NORTH POLE WITH STEAM-RAMS.

Boats described as steam-rams are now in use in ice-locked Russian harbours and rivers, and have proved that they can force their way through thick ice, even with seventy-two degrees of frost. The harbour of Vladivostok, till of late hermetically sealed for four or five months, has since 1893 been kept accessible through the winter; the Finnish port of Hangö is now open to commerce throughout the year. And last winter a similar steamram kept up connection with the Ural railway through the ice of the Volga at Saratoff. It is proposed now to keep open, by stronger boats of this kind, the communication of St Petersburg with the sea, and to force a winter connection through the ice from Archangel to the mouth of the Yenisei. Admiral Makarof, addressing the Russian Geographical Society, insists that still more powerful boats of this kind might safely be counted on to cope with polar ice, such as Nansen had to deal with, and to cut a passage to the North Pole.

THE ARTESIAN WELLS OF QUEENSLAND.

In an elaborate paper on Queensland and its resources in the Scottish Geographical Magazine for December last, we see it authoritatively affirmed that a large area of Western Queensland, formerly hopelessly arid and useless for pastoral or any other purposes, has been completely transformed by artesian wells, drawing supplies from the water now known to be stored in the Lower Cretaceous formation (which underlies fifty-six per cent. of the whole colony). Of these artesian wells 454 have been sunk, of an average depth of 1168 feet; 317 overflow naturally, and the total produce is stated at over 193,000,000 gallons daily.

On the eastern side of the coastal range there are further thirteen artesian wells, of an aggregate depth of 13,200 feet. Some of these bores yield between three and four million gallons daily.

SPONTANEOUS COMBUSTION ON SHIPBOARD.

At a meeting in September last Mr F. M. Syme addressed the Insurance Institute of Victoria on the subject of 'Causes of Fire,' and gave some very interesting information with regard to what is commonly known as 'the spontaneous combustion of coal cargoes.' This phenomenon, by which many good ships have been destroyed, was at one time attributed either to the oxidation of iron pyrites, an impurity always present in coal, or to the influence of moisture. Experiment has shown that both these theories are untenable, and it is now believed that this mischief is due

to the chemical action set up by the absorption in the coal of atmospheric oxygen. Large coal, where the proportion of surface to bulk is comparatively small, is the safest, and any heat that may be evolved is rapidly carried off by the air-spaces between the lumps. But, owing to the rough manner in which coals are generally dumped into a ship's hold, the coal is broken up into fragments, and is prepared, as it were, for spontaneous combustion. It is found, moreover, that the fire invariably begins just below the hatchway, where a cone of broken coal is formed by this rough method of loading. It has also been ascertained that a large bulk of coal is more liable to combustion than a small one, and that loading during a high summer temperature has a direct bearing upon the liability of coalships to this form of accident.

HOME-COMING.

By Mrs M. Corbet-Seymour.



FTER nearly twenty years of life in foreign cities, the home-coming is not an unmingled pleasure. Even the sight of Dover Cliffs does not awaken one's patriotic feelings. We have looked at them several times

with more satisfaction when ours has been a holiday-visit to England; a return ticket to London and back setting a limit to our stay. But this is 'coming for good,' as children say; for it has suddenly been borne in upon our inner consciousness that, if we really intend to die in the mother-country (as we have always stoutly declared) it will not do to reside too long on the other side of the Channel.

So here we are. Has our native tongue grown strange to us, or is there something in the Kentish dialect which puzzles us? Did the middle classes speak with more refinement twenty years ago than now? For even in the greetings of well-dressed men and women on the pier, the letter 'h' seems a forgotten quantity, and I hear a pretty girl assuring a friend, whom she has welcomed at the landing-place, that 'the Dover people 'old their 'eads that 'igh there's no bearing them.'

We stand at the door of the Customs. We exclaim, 'How much better they manage this at Ostend!' For there the baggage is examined without an instant's delay by a number of waiting officials; while here a solitary man informs you that he is coming to open the door 'in about 'alf an hour;' meanwhile you may cool your heels and grumble à volonté.

The search for 'cigars, perfumery, spirits' is over; we have none of these contraband articles. Our trunks are violently hurled on to a truck, the porter receiving our gratuity with a stoicism that wounds us to the quick. In Belgium or

in France the coin we offered would have made a commissionaire's heart glad within him; a fearful doubt comes that it was contemptible in the eyes of the Briton.

We have secured rooms in Dover under the impression that we shall need a little time to renew our acquaintance with English ways and customs, before the actual 'settling down.' For that purpose, it is as good a place as any other. The sight of Calais on a fine day will be cheering; the coming and going of the Ostend boat will be somewhat like the coming and going of a friend; we are not, after all, so very far away from familiar faces and places.

The smart, white-capped maid shows us into what she calls 'the droring-room;' a well-dressed, florid matron comes to us. Our English appears to puzzle her as much as her English puzzles us; but we shall get used to each other. Our bedrooms look clean and comfortable, yet how strange! Tea is served; a substantial meal, as our landlady expresses a conviction that after a 'bit of a toss' we must be greatly in need of food. As a matter of fact we are not. We drink the tea appreciatively; we enjoy a slice of dry toast, because we have never had any since the days of auld langsyne; but we turn from the cold joint. To-morrow perhaps; not now!

We will go out; look around us, gaze into shop windows, try to like our surroundings. 'Great Bargains' hold us spell-bound; 'Clearance Sales' draw from us exclamations of surprise: surely everything must be cheaper than it was twenty years ago? Before the grocer's window, with its display of sugar, jams, marmalade, pickles, we stand in silent amaze. But we ask ourselves if the rules of English grammar have undergone a change since our day, and if spelling is not

exactly what it used to be? for a huge slab of cake is labelled 'Not to be beat: 4d. a pound,' and some unfamiliar sweetmeat is introduced as 'coker-nut bars.'

We have heard it said abroad that the English have a talent for advertising. We find that saying true; for the sounds of music float upon the breeze, and in our simplicity we take it to mean that one of the regimental bands is coming our way; we wait. A large open wagonette appears, drawn by three horses. Within it are seated six men with various instruments, and as they pause in their labours the driver reins in his steeds, and, rising to his feet, begins to tell of the wondrous bargains in ironmongery and hardware which, for the small price of sixpence per article, can be secured at a certain shop in the town. We walk on, and are conscious of the sound of a bugle. This must mean that the Highlanders are marching, or that there is firing from the fort. We are mistaken; it is only a man with air-balls, whirligigs, and other toys that children affect, which he declares himself willing to give in exchange for empty bottles and jam-pots, or to sell two for a halfpenny.

And talking of children suggests to us the remark that the manners of the rising generation do not seem to have changed for the better. Surely in our day they lived in their homes? whereas now they seem to live in the street when they are not at school, and to riot there as they may choose. We hazard the opinion that the continental police would reduce them speedily to order, greatly to the benefit of the public.

But there is an aspect of prosperity about the working classes which is good to see. No starving misery meets the eye in Dover; even the cats and dogs look well-fed and comfortable. Certainly a few street-songsters appear to desire alms. At this moment a woman is informing us in verse that she is 'all alone, that her friends are gone, that her only joy is her baby boy;' but she is neatly dressed in a black gown, jacket, and hat, while the long-legged girl who shrilly assists her with the melody is quite irreproachable in the matter of pinafore, shoes, and stockings. On our first Sunday, too, a comfortably-clad female indulges the inhabitants of the road with a hymn of many verses. But one halfpenny, so far as we can see, is the pecuniary result, and we are not able to feel any commiseration for her. She does not look in any desperate need.

The Sunday afternoon proves convincingly that the female mind appreciates the military man. Every soldier who passes by our window—and they are many—has a girl on his arm, a glow of satisfaction expressed on her features. The civilians seem to be nowhere; they walk in twos and threes without any 'young lady' to enliven them. Tommy Atkins is in the ascendant; and, out of the different regiments stationed here, the Highlanders are most in favour. Fathers and

mothers straggling past with their unruly children dressed in Sunday best; a few parties of Saturday to Monday excursionists stroll along the sea-front—only a few, for the season is at its last gasp; but the soldiers preponderate.

We hear that the annual visitors do not leave until November; but this seems to be a landlady's legend spread abroad for the purpose of keeping up her summer prices, for each day reduces the number of sea-bathers, the invalids in bath-chairs, the nurses and perambulators, the children who paddle in the waves and fill their pails with salt water.

October is kind to us in giving us some hours of sunshine, even though the wind is cold at the beginning and end of each day; still, everything around us tells that winter is coming—our first winter in Old England after so many years of absence. Shall we like it? We are not sure. But we begin to feel some pleasure in being home again; and, packing up our belongings, we move inland, resolved to sigh no more for what we have left on the other side of the sea.

THE COMING OF CUPID.

SHE spoke no word at first; but, through her tresses,
Look'd up to meet the light in Eden lit;
Hid her hot face away from his caresses,
Which, though they touch'd not yet, emblazon'd it!

All through her childhood's days she had been lonely; And when young girlhood met her, unawares, Her heart reserv'd its bitter sorrow; only 'Some one to love me' crept into her prayers.

The leafless branches tapped: a robin twitter'd
Its poor, half-frozen anthem in the snow;
But, in the fading light, a circlet glitter'd,
And Paradise was shining in its glow!

The voice spoke now that said her face was dearest;
The lips had come to comfort, and defend;
The hero of her dreaming held her nearest,
As he would vow to hold her to the end!

So, with the breath of God upon their faces,

And in their hearts the promises of morn,

They watch'd the old wrongs creep from empty places,

The joyless years fall back—for love was born!

Edith Rutter.

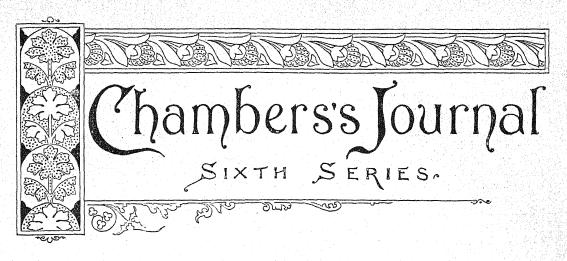
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1st. All communications should be addressed 'To the Editor, 339 High Street, Edinburgh.'

2d. For its return in case of ineligibility, postage stamps should accompany every manuscript.

3d. To secure their safe return if ineligible, ALL MANUSCRIFTS, whether accompanied by a letter of advice or otherwise, should have the writer's Name and Address written upon them IN FULL.

4th. Poetical contributions should invariably be accompanied by a stamped and directed envelope.



THE HUSBAND OF MILLICENT.

BY GEORGINA M. SYNGE.

CHAPTER I.



ILLICENT felt dull: she had finished the instalment of literature provided by Mr Mudie. It was a wet day, and she was all alone. Her husband had been suddenly called from home by the illness of his father,

and had been away for nearly a week.

Of course he was obliged to go. She herself had urged him to do so. All the same, this did not prevent her from feeling it to be a very disagreeable necessity. That she, a bride of only a few weeks' standing, should be left to herself even in so good a cause was distinctly disagreeable. It was disagreeable and it was unusual. She took care to explain the situation to her friends. Millicent was sensitive as to the world's verdict upon her marriage. She was not particularly good-looking, and she possessed most of the money. That their conjugal relationship, in spite of these drawbacks, should shine forth as ideal was her great desire; that it should be admitted by all observers that she had been married for herself alone. Now Millicent regarded herself very seriously; and she regarded other people very seriously too. The parish, her husband, even the boy who cleaned the boots, were matters to be pondered over; their words and actions had to be seriously considered and weighed. All this of course occupied a good deal of time; and as it is a known fact that words and actions in this disappointing world are seldom consistent, and very rarely agree -except in the case of dull bores or idiots-it was not altogether a satisfactory study.

It had not been altogether satisfactory with regard to her husband. It was not that his conduct left anything to be desired. He was affectionate. He was almost unselfish. He was very kind. It was in himself, in his nature, that the disturbing element lay. There were contradictions in him which she could not understand; they

baffled her. She could not classify him, so to speak. She could not arrange him to her mind.

He had many admirable qualities, no doubt. He did his duty. He worked the parish with zeal. There was little mixture of mammon in his life. And yet she felt, she hardly knew why, that he was not altogether and only this. He was something besides. It appeared to her almost as if he were two men.

It was only very occasionally that she caught a glimpse of the other man. As a rule he was entirely the orthodox and conventional rector of an important parish. But just as she had settled herself into admiration of this aspect of his character he would utter a few words which revealed something startlingly opposite.

It disturbed her. She had been accustomed to people whose sentiments and emotions, in ordinary circumstances, could be calculated to a nicety. Given an Irish land-bill, a High Church curate, or an Advanced Woman—and you could rely exactly upon their views.

But she never felt that comfortable certainty about Henry. He appeared sometimes in his soul of souls to have sympathies against his own views. She had sometimes the horrible doubt as to whether he really believed in his views. Sometimes it seemed to her as if he had forgotten them, as if he had mislaid them—as one mislays one's umbrella—and was making use of those belonging to another person. It puzzled her—puzzled her all the more because he was so unmistakably a good man.

Another thing which puzzled her was his reserve. He was frank and outspoken, and yet he was reserved. You could not exactly tell which he was going to be. He would begin to talk about his tastes and his ideas, and would suddenly come to a stop. He would begin some interesting description of a bygone scene in his life, and Reserved.]

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suddenly break off and turn the conversation to other things. It was as if there were something in his memory from which he shied away; something he dreaded which was always looming near and which he must avoid.

She used to wonder about these past years. He had taken orders some while after leaving college, at the wish of his dying mother. How had he spent the intervening time?

A careful perusal of modern literature had convinced her that perfect candour with regard to their mutual past was the only satisfactory foundation upon which to begin married life.

But Henry had revealed curiously little. The small and meagre past which he had unbosomed might have been proclaimed upon the house-tops without any discredit to his cloth. It disappointed her. She was a high-minded woman, and yet it disappointed her. She would have preferred something not exactly black, but perhaps a little gray, not unnaturally and wholly white. It would have made her feel more satisfied that nothing had been held back. She would know the worst; most likely only a mild and easily-forgiven worst. But still she would know it. There would be satisfaction in that.

During the long, lonely week she had brooded a good deal upon all these matters. She felt a curious mixture of feeling—annoyance with her husband for giving cause of annoyance, and with herself for feeling annoyance, being part of this contradictory condition. She felt she was foolish and unreasonable, and yet she could not drive the feeling away. And to-day she had made up her mind that she was altogether foolish and unreasonable—after a couple of hours spent in staring gloomily into the fire, and listening to the rain beating against the window and the howling of the wind outside.

After all she had a very happy, comfortable home. The house was roomy and old-fashioned, and furnished exactly to her taste. The garden was admired by all her friends. The parish was grateful and appreciative. The neighbours more than friendly. And Henry was always good and kind. As she looked at his empty chair opposite her, she saw a vision of him sitting there with his book—large and kindly and anxious to please—and her heart warmed. Yes, she was unmistakably foolish.

Presently a happy thought struck her. Henry had a good many books in his study. Perhaps she might find amongst them something to read. At any rate it would be pleasant to visit his own particular den, and look at his belongings. It would be a pleasant change.

She got up from the comfortable low chair on which she had been sitting, and placed the guard upon the fire; and she opened an inch of the window, and picked up a few leaves which the hydrangeas had shed upon the floor. Then she left the room and walked upstairs.

The study was rather curiously situated. It was at the top of the house, upon a floor which they did not use—a most unusual place for studies. But Henry had explained that he liked plenty of air and light, and that he could not write his sermons in the midst of noises and disturbances, and here certainly was perfect quiet and peace.

It was a cheerful room, with a large bowwindow and deep sill in which you could sit and admire the spreading view, carrying your eyes over the little white village on the hillside and down the far-reaching valley which dipped into the horizon beyond.

She sat down and looked around her, noting every detail with interested eyes. The room was plainly, almost severely, furnished. The only easy-chair was stiffly upholstered in unyielding leather. The floor was oak-stained, and had a simple square of matting in the centre. There were shutters to the windows, but there were no curtains. Bookcases made by the village carpenter covered part of the walls, the rest of which were conspicuous by the absence of pictures of any kind.

Presently Millicent got up. She went to the bookshelves and began to inspect the rows of volumes which they contained. She picked out one or two that she thought she would like, and then she began curiously to examine the rest. Shelf after shelf she scanned, getting up into a chair to view those at the top, and even putting her hands behind on the chance of some discovery. But no. There was nothing of startling interest of any kind. It was an ordinary clergyman's library, nothing more. There were Fathers of the Church, Concordances, Commentaries, Bampton Lectures, Ecclesiastical Histories, the Lives and Works of many eminent persons, and a certain number of volumes 'without which no gentleman's library is complete!'

But somehow they had the look of books which told no tale, books from which the taste of the owner could never be gathered. There appeared to be no special corner for favourites, no worn and much-used copies, no pet edition tucked into a chair or lying at an open page on the table. 'If there were only a stupid yellow-back it would be something,' said Millicent with a little disappointed sigh.

She came and leant over the high back of the oak-chair in front of the writing-table, and stared curiously in front of her. Everything was immaculately neat: the inkstand; the pens; the sermon-paper, which lay in a pile by the blotting-pad; the dictionary, the Concordance, and Dr Liddon's Sermons, which lay ready for use close at hand.

Two photographs, somewhat faded, of his father and mother, in a folding leather frame, were the only ornaments to be seen. There were no college mementoes—no silver cups, no trophies

of athletic days—nothing that gave evidence of any predilection of any kind.

Millicent turned away. She slowly gathered up her books and went out into the passage.

As she did so she remembered that she had never been into the room next to the study. It was locked when she had tried to open it, and she had always forgotten to ask Sarah for the key. It was over the spare-room, and must be a good size. Some day they would have to furnish it. Living there by himself, Henry of course had not required any other rooms upon that floor. There were three of them. One she knew contained boxes, the other was empty, and there was this one that she had not seen. She would look in and see what it was like.

Somewhat to her surprise, however, when she turned the handle of the door she found it was still fastened, nor was there any key in the lock. Just as she was wondering what she should do, she heard Sarah the housemaid coming upstairs, and she leaned over the balustrade to speak to her.

'I want to look into the room near the study; why is it locked and no key?' she inquired.

But Sarah appeared as if she did not hear. She continued her way to the bedrooms, when Millicent called to her again and repeated her question.

The woman came slowly to the foot of the stairs. 'It's always kept locked, ma'am,' she replied, a curious look Millicent could not understand coming over her face.

'Well, where is the key? It ought to be in the door.'

'I don't just remember where it is. I expect it's got mislaid, ma'am.'

'Mislaid! Why, I'm sure I heard you overhead when I was arranging the new toilet-set in the spare-room this morning. Some one was creaking about, and of course it must have been you.'

'Rooms has to be aired,' answered Sarah rather gruffly, as she gave a sidelong glance towards the backstairs.

'Yes; I never said to the contrary. What I mean is, the key can only be lost since this morning, and I shall expect it to be found. I mean to look over the room to-morrow.'

And Millicent, rather vexed at what she looked upon as the whim of an old, spoilt servant—for Sarah had been with her husband's family for many years—walked off with her books and settled herself once more in the cosy Chesterfield sofa by the side of the fire,

The next day, after ordering dinner and attending to various domestic duties, Millicent went up to her room, where Sarah was engaged in dusting.

'Well, I hope you have found that key,' she said rather sharply. 'I am going up there now.'

'I can't say I have, ma'am,' replied the woman as she began re-arranging the set of the curtains.

'Have you looked everywhere, and have you asked the other servants?' demanded her mistress. Sarah's apparent apathy in the matter was most annoying.

'Oh, the girls don't know anything about the room. The master doesn't like them up there,

messing round.'

'Well, it's very tiresome losing it like that; and, as you don't seem as if you could find it, I shall call and tell a man to come and fit a new key, when I go to the village this afternoon.'

Sarah turned round with a startled look in her face.

'I wouldn't be doing that if I were you, ma'am,' she said as she began to twist the corner of her duster nervously in her hands.

Millicent stared at her with wide-open eyes of surprise.

'I beg pardon for saying it, ma'am,' she continued reluctantly, as if the words were dragged out of her—'I beg pardon; but I don't think the master would like anybody to open that door.'

'Good gracious! what do you mean?' cried Millicent, 'as if that has anything to do with me!' She felt nettled at the idea of Sarah imagining anything so preposterous.

Well, ma'am, I only know what the master said, and that was that the door wasn't to be

opened by nobody.'

'How ridiculous you are! That does not in the least apply to me—how should it?' But in spite of herself an undefined feeling of dread was creeping into Millicent's mind.

'It isn't for me to say it, I know, ma'am; but I wouldn't go in if I was you.'

'Why not?' demanded Millicent, in as unconcerned a tone as she could command.

'I can't tell you, ma'am; but the master—' here Sarah stopped short, and waved her duster tragically to supply the place of further words.

Millicent stood staring at the old servant, uncertain what course to take. She felt it would be undignified to question her further on a matter which implied that her husband had hidden something from her. No; no vulgar curiosity would she display. She would wait till Henry's return and he would of course put it all right. That was the most sensible plan. Other women might try to worm it out of the servant or force open the door; but Millicent had too much pride for either one or the other. She preferred to wait.

'It is perfectly ridiculous, and must be all your own imagination,' she said at last, and without waiting for a reply swept out of the room and downstairs into the drawing-room.

But tears were in her eyes as she threw herself into an arm-chair and began to think things quietly over.

There was something in it after all. He had some secret he wished to hide from her—some-

thing he did not wish her to find out. And it was in some way connected with that room. It seemed so mysterious and extraordinary. And to think that a servant should know all about it, whilst his own wife was excluded! The thought made her heart beat in angry thuds. It was so entirely contrary to her views as to what married life should be—the modern improved views; for Millicent was extremely interested in all the new ideas as to the improved position of her sex. The recognition of equality of rights in married life was to her a very serious matter. That there should be reciprocity in confidence as well as interests appeared to her as a most important part of this position.

With all these sentiments Henry had seemingly agreed. He was as modern in his ideas as to a wife's position as she could wish. But now it appeared as if they were merely a cloak. He had his reservations all the same.

At any rate it looked like it.

However, she must not judge too soon. There might be an explanation after all. It would be wiser, no doubt, to wait and see what Henry had to say, and until then not to worry herself about it. It really was absurd to worry, when it might be nothing at all.

She managed to argue herself back into cheerfulness again; and the next day she ate her breakfast in better spirits; and when the parlourmaid brought in a pile of letters she picked out the envelope addressed in her husband's handwriting with a sensation of particular affection.

But when she had broken the seal and scanned the contents her face fell. He said that her father-in-law was worse; it would be impossible to leave him for the present. He had arranged for some one to take his duty on Sunday, and hoped things would go on all right. He was very concerned at leaving her all by herself. Could she not get a friend to come and stay until his return?

Millicent read and re-read it several times. It was very annoying. She felt sorry for her father-in-law, for Henry's anxiety, and for the inconvenience it would entail; but, through it all, she knew she was sorry for herself. She would have to wait perhaps for some while to find out what she so much wanted to know. She felt ashamed of herself for allowing so selfish a thought to influence her at such a time; but there the feeling was, and she could not help being aware of it.

She busied herself that morning in packing up a small portmanteau with things that Henry might want, and paid some visits in the parish to sick people who would be expecting to see him.

The next day the news was no better, and the day after that it was worse; and so another week passed away. Millicent became more and more restless and uneasy. She could not take an interest in her usual occupations, her thoughts kept flying back and back to that mysterious locked door. She felt that at any cost she must gain admittance and see for herself what was there, if only to restore her peace of mind. For whatever it was, she felt she could bear it better if she knew, and that any revelation would be pleasanter than this harassing uncertainty.

At last, after much consideration, she determined what she would do. She would mention it in her next letter—not as if she suspected anything, but casually, in an easy natural manner. There seemed little prospect of his returning for at least another week, and she felt she must have her mind put at rest.

So, after telling him all the parish news and the actual little details about herself and her doings, she said: 'By the way, Sarah has some ridiculous story about your not liking me to go into the room next the study. I believe she has lost the key on purpose. Of course it is all her imagination, and I only mention it to you as I think you will be amused. I am going to have it opened. I want to see if it won't make a nice bachelor's bedroom.'

Millicent read this over with some satisfaction. No one could possibly guess that she thought anything more of it than of a perfectly natural occurrence. She would not for worlds have Henry think that she had any unpleasant thoughts upon the subject, especially as there might be nothing in it at all.

She carefully sealed the letter and took it herself to the post, and awaited an answer with an amount of impatience which she in vain tried to subdue. At last it came. It was a short, little note telling her the news about the invalid, and full of hopes of rejoining her soon. And at the end came a postscript evidently written in a hurry, saying, 'Don't go into the room next the study.'

Millicent gasped. She read and re-read that last sentence again and again. 'Don't go into the room next the study!' So it was true after all! He had some secret he wished to conceal from her.

And after all it was not the thing itself, whatever it might be, which angered her. It might be something quite satisfactory and unimportant. It was that her husband should keep it from her knowledge; that he should treat her with such scant courtesy, not to speak of confidence, as to allow a servant to know what was withheld from his wife.

However, her pride came to her rescue in answering the letter, and a woman's instinct for concealing her feelings prevented her from in any way alluding to the subject. Nor did she write less lengthily or affectionately than was her usual custom.

But when it was finished she resumed her injured feelings and brooded over her wrongs, as she at length began to consider them, until their swollen proportions quite obscured all other points of view.

THE EVOLUTION OF THE MAGIC-LANTERN.

By T. C. HEPWORTH.



EARLY forty years ago there appeared in this Journal (Vol. XII., July 12, 1859) an article entitled 'Shadows in a New Light,' by Col. J. J. Mellor, M.P. It dealt with what at that time was, in the

Midlands at any rate, an astounding novelty—the exhibition of 'illuminated photographs,' or dissolving views, by means of the oxyhydrogen or 'magic' lantern, as it was then commonly called. The Manchester Mechanics' Institute had during the previous winter inaugurated a series of exhibitions of this character, with very great success, and the article referred to points out the educational importance of such a means of portraying distant scenes and objects of art to the multitude.

During the four decades which have elapsed since that article was published, the lantern has become such a very popular instrument in the hands of all teachers that there is certainly no place in the kingdom where it is not regularly, or at least occasionally, employed. It is therefore a matter of some interest to trace its history and to indicate its varied applications.

It has been thought by some writers that this method of projecting pictures upon a sheet or other surface was known and employed some hundreds of years ago, and the chief ground upon which this belief is based appears to be a passage in the autobiography of Benvenuto Cellini, the Florentine goldsmith and sculptor, who describes a weird experience in the Colosseum of Rome, when, by means of certain incantations, several legions of devils were made to appear before him. Now, it is quite certain that no effects of the kind could be produced in a building of the vast size of the Colosseum without the best of optical appliances and the most brilliant light-both unattainable things in the first half of the sixteenth century. So we must assume that the imps which Cellini saw, or thought he saw, were optical illusions brought about by some other agency than the magic-lantern.

A hundred years later Athanasius Kircher, the learned Jesuit, produced his book on 'the great art of light and shade,' in which he describes and pictures certain contrivances which plainly show that he was fully acquainted with the optical principles upon which the lantern is based, and very possibly if he had had at his disposal a better illuminant than a rush-candle or a smoky oil-lamp he would have reduced theory to practice. For want of an efficient lamp the magic-lantern made little progress beyond toyland till after the year 1826, when Lieutenant Thomas Drummond used in the Irish

survey the so-called Drummond Light or limelight, invented a year or two before by Sir Goldsworthy Gurney.

In the year 1838 the Polytechnic Institution in Regent Street, London, was incorporated by royal charter, and within a few years of its opening we find, by reference to the early catalogues, that 'dissolving views,' shown by the limelight, formed one of its attractions. It was the province of this institution, the prototype of the many which now exist with wider educational aims, to combine amusement with instruction, or, as the catalogue quaintly puts it, 'The directors have not been unmindful of the inducement which a path of flowers opens to the acquisition of knowledge.' One of the flower-beds was represented by a battery of magic-lanterns, by which hand - painted pictures on glass were projected upon a screen of large size. So long as the pictures for the magic-lantern had to be drawn and painted on glass by hand it could be regarded only as a toy. The form of the Polytechnic instrument was cumbrous, for the pictures measured as much as eight inches across, and the lenses were of proportionate size. (Some of these pictures, by the way, were veritable works of art, and cost as much as twenty pounds apiece.) It is obvious that, under such conditions, the magiclantern in this, its best form, had but limited use. But directly it became possible to produce pictures of far finer quality, at a fraction of the cost, by means of photography, the toy became a valuable scientific instrument. The photographic pictures, too, were reduced in size to little more than three inches, and this made a general reduction in the dimensions of the lantern possible and desirable. Thus the magic-lantern became a marketable thing, which can be produced at a cheap rate, and pictures adapted to it, illustrating travel in every corner of the globe and every department of science and art, can be purchased for one shilling apiece. The aid it affords to the traveller in rendering more graphic his account of his own experiences is incalcul-

Another very important aid in popularising the optical lantern—for the toy name 'magic' has been dropped in deference to its more exalted uses—is the introduction of compressed oxygen and hydrogen gases. Without these gases the lime-light is impossible; and a few years back the operator was obliged to go through the drudgery of making them himself, and storing them in huge india-rubber wedge-shaped bags, which, placed under pressure, would serve for a couple of hours' exhibition. These bags, their pressure-boards, and heavy weights are now things of the

past, and the lanternist obtains his gases compressed in cylinders of mild steel. The oxygen is produced by chemical process from the atmosphere, and for hydrogen the ordinary gas used for illuminating purposes (carburetted hydrogen) furnishes an efficient substitute. A cylinder little larger than a wine bottle will hold ten feet of gas, which is sufficient for an evening's use. The gas-jet employed for the lime-light is in reality an oxyhydrogen blowpipe, and its flame impinges upon a cylinder of lime, which is thus rendered incandescent. In brilliancy it has but one rival, and that is the electric arc-light.

Now that the electric current is being laid on to our public halls, the use of the arc-light for fantern work is receiving much attention. No one who has not seen the lime-light and electric light each illuminating one-half of a white screen can form any idea of the immense advantage of employing the latter for this purpose of pictorial projection. It is not only far more powerful as an illuminant, but it is much whiter—that is to say, it is much purer in tint. For experiments in which coloured rays enter, it is indispensable, and no one would think of using the prism for spectrum analysis work, if the results are to be projected upon a screen, without its help. It has the advantage also of simplicity, a couple of wires from the house supply of sufficient capacity to carry the necessary current taking the place of the cylinders of gas necessary with the limelight. At all lecture-halls where the lantern is in constant use the arc-light is superseding the older form of illumination. The incandescent form of electric lamp has been recommended for use in the optical lantern, but the illumination which it affords is far too feeble for use except in a small room; besides, to get the best effect the area of the light-spot must approach as nearly as possible to a point, and not cover a large surface.

The optical lantern is not confined to the exhibition of pictures and diagrams, but can to some extent be employed for showing experiments in the lecture-hall or in the school-room, and it is particularly valuable in this rôle because of its powers of magnification. All science teachers know well that certain experiments of vital importance to the full understanding of the subject under discussion are comprised within such narrow limits that they are confined to the individual eye, and cannot be effectively exhibited to a class. Let us, for example, suppose that a lecturer wishes to show how by means of a magnet a piece of steel can be readily endowed with magnetism. As an illustration he will perhaps take a sewing-needle, rub it with the magnet in the orthodox manner, and show that it will thenceforward attract iron filings — which will eling to its end until it looks like the head of a mop. He may explain all this to his andlence, and the students close to the lecturetable will perhaps be able to see the result of the experiment. But put the needle before and after magnetisation on the lantern stage together with the iron filings; it will be magnified to the size of a scaffold pole, and the particles of iron will be seen to fly towards it in a manner impossible to show in any other way.

The lantern is constantly in evidence at the lectures at the Royal Institution, London, and occasionally some very remarkable experiments are shown by its aid. Not long ago Professor Dewar was able to exhibit in this way a frozen soap-bubble floating in a tiny glass tank of liquid air, while a miniature snowstorm was going on in the space above the floating bubble. Here was an experiment, the apparatus necessary to which was comprised within the space of two or three inches, enlarged by the lantern to six feet or more, so that all in the crowded lecture theatre could thoroughly appreciate its beauty.

A modified form of lantern will permit of the exhibition of solid and opaque objects instead of transparent pictures. In this case the object to be shown is very strongly illuminated from the front, and a lens throws its image on the screen. For showing mineral specimens or precious stones in all their natural colours this method is invaluable. It has also been employed for illustrating a lecture on the evolution of the watch, various forms of those timepieces being shown upon the screen with the wheels in movement. All kinds of small objects can be shown in this way, and by means of larger apparatus greatly magnified; the human face has also before now formed a curious object on the screen. It must be admitted that this last experiment can only be carried on for a few moments, in mercy to the person to whom the face belongs, for the heat from the powerful lights necessarily used is comparable only to that of a furnace.

The image shown by the ordinary lantern is an inverted one, and in the exhibition of pictures the difficulty is readily met by inserting them in the lantern upside down, a necessity which has again and again led to ludicrous mistakes. But it is obvious that in many of the experiments here detailed inversion is impossible, and in such cases rectifying apparatus has to be employed to show things the right way up.

A special form of microscope can be attached to the optical lantern in order to show ordinary microscopic objects which without it would be only available to the individual eye. Even with the electric arc the effect is poor, for the aperture of a microscope lens is so small that very little light can get through it, and when the image is spread over a large screen that little is naturally much attenuated. It therefore comes about that only those near the screen can see the details of the subject. A far more effective plan is to show in the ordinary lantern enlarged photographs of such objects, photo-micrographs as they are called, and then there is no limit as to light. The

amount of magnification possible by exhibiting microscopic pictures in this manner is almost beyond belief. But let us take an example. The writer has some photographs of this kind in the form of lantern slides which measure two and a-half inches in diameter. In the work of photographing them the original objects have been magnified one thousand diameters. Now, if we place one of these pictures in the lantern, and project its image on a screen measuring fifteen feet, magnifying the picture to that size, we shall stretch it seventy-two diameters, so that the total magnification of the original object is no less than seventy-two thousand times. Suppose that it would be possible to show the image of a halfpenny magnified to the same extent, we should require a lantern screen much more than a mile long to exhibit that image in its entirety. For a halfpenny measures exactly one inch, and seventytwo thousand inches are equal to one mile and two hundred and forty yards.

Another adjunct to the lantern which is often called for by the lecturer on science is known as the vertical attachment. By means of this device an object, which from its nature must be kept in a horizontal position, can readily be shown on the screen. It is laid on a glass plate through which the light from the lantern is projected from below by an inclined mirror, the same means being adopted to project the beam once more in a horizontal direction towards the screen or sheet. By this means, and by the help of a glass tank, it becomes possible to perform experiments in chemistry, electricity, &c., so that the results shall be evident to a large audience. The applications of the lantern in this direction are rapidly increasing, and most modern instruments are so made that a large number of experiments can be shown by their aid.

The latest, and one of the most interesting, employments which the optical lantern is called upon to fulfil is the exhibition of cinematograph, or living pictures. The introduction of these pictures has aroused the same kind of enthusiasm as that once accorded to dissolving views; but a consideration of this application of the most popular of optical appliances must be reserved for another article.

JOHN BURNET OF BARNS.

By JOHN BUCHAN.

CHAPTER XVII.-THE COMING OF THE BRIG 'SEAMAW.'



was the third day of April, a day so cool and mild that every one who could was in the open air, that I sat in the little strip of garden behind my lodging. The soft spring wind fluttered the

leaves of my book and stirred my hair, so that I found it hard indeed to keep my attention fixed. Some yards behind me Nicol sat cleaning a fishing-rod, for in the idle days he amused himself with trying his skill among the sleepy streams. He was whistling some bars of 'Leczie Lindsay;' and the tune, which I had often heard in Tweeddale, put me much in mind of home and inclined my heart violently to the place I had left. So, soon I found my Plato lying listlessly on my lap, and my thoughts far away over the sea.

Just now, I knew, would be the lambing-time in the Tweed hills, and all the valleys would be filled with the noise of sheep. The shepherds, too, would be burning the bent, and the moors sending up wreaths of pungent smoke. I minded the smell so well that I almost fancied it was in my nostrils in place of the moist perfume of hyacinth and violet. At Dawyck, Marjory would be early abroad, plucking the spring flowers and bringing in armfuls of apple blossom to deck the rooms. The thought of Marjory gave me sudden discomfort. I reflected for the thousandth time that I had heard nothing of her for months, and I fell to wondering greatly at her silence. By-

and-by, what with thinking of home and of her, and chafing at her neglect, I found myself in a very pretty state of discontentment.

It was just then that I heard a voice behind me, and turning round saw Nicol approaching in company with another. The stranger was a man of remarkable appearance. He was scarcely the middle height, but his breadth across the shoulders was so great that he seemed almost dwarfish. He had arms of extraordinary length, so long that they reached almost to his knees. His square, weatherbeaten face was filled with much good-humour, and the two eyes which looked out from beneath his shaggy brows were clear and shrewd.

'This is Maister Silas Steen o' the brig Seamaw,' said Nicol, making an introduction, 'whate has come frae Scotland this mornin', and says he has letters wi' him for you.' Having delivered himself, my servant retired, and left the new-comer alone with me.

'You'll be Master John Burnet of Barns?' said he, looking at me sharply.

'The same, at your service,' said I. 'May I ask your business with me?'

'It's just a bit letter for you,' and he dived into his pocket and produced a packet.

I took it hastily, for I had some guess who was the writer. Nor was I wrong, for one glance at the superscription told me the truth. And this is how it ran:

'For Master John Burnet, In the house of Mistress Vanderdecker, near the Breedestraat, at Leyden.

*Dear John,—I have not written thee for long, and I trust that thereby I have not given thee trouble. I am well and happy when this leaves me, though desiring thy return. I trust your studies are to your satisfaction. Tam Todd from the Barns was over yestreen, and gave a good account of all things there.'

Then came a pause, and the writing was

resumed in a hurried, irregular hand.

'I am not free to write my will. O John, dear John, come back to me. I am so unhappy. I cannot survive without thee another day' (this latter word had been scored out and 'month' put in its place). 'I am in dreadful perplexity. Come quick.

Marjory.'

You may imagine into what state of mind the reading of this letter threw me. My lady was in trouble; that was enough for me, and she desired my aid. I guessed that the letter had been written stealthily, and that some trouble had been found in its conveyance, for it bore the marks of much crumpling and haste. I could make no conjecture as to its meaning, and this doubt only the more increased my impatience.

From whom did you get this !' I asked.

'From a great, thin, swart man, who brought it to me at Leith and bade me deliver it. I came post-haste from Rotterdam this day.'

I ran over in my mind the serving-folk at Dawyck, and could think of none such. Then, like a flash, I remembered Tam Todd. This increased my fears. If Marjory could get no porter for her message save one of my own servants, then the trouble must be at Dawyck itself.

I can find no words for the depths of my anxiety. There and then I resolved on my course.

'Your ship is at Rotterdam?' I asked.

'Yes,' said the captain.

When does she sail?

'To-morrow night, when the cargo is on board.'
'I'll give you twenty pieces of gold if you'll

sail to-night.

The captain shook his head. 'It canna be done,' he cried. 'My freight is lace and schiedam worth four times twenty pieces, and I canna have a voyage for naething.'

'Listen,' said I. 'I am in terrible perplexity. I would give you a hundred if I had them; but I promise if you bring me safely to the port of Leith they shall be paid. Ride back to your vessel and ship all the stuff you can, and I will be with you at eleven o'clock this night, ready to sail.'

The fellow shook his head, but said nothing.

'Man,' I cried, 'for God's sake, I implore you. It's a matter to me of desperate import. See, there are twenty pieces, and I'll give you my bond for eighty to be paid when we win to Leith.'

'Tut, Master Burnet,' said he, 'I will not be

taking your money. But I'm was to see you in trouble. I'll tak' you over the nicht for the twenty pieces, and if I lose on the venture you can make it up to me. It's safer carrying you and running straight for the pier than carrying schiedam and dodging about the Bass. And I'm not a man that need count his pennies. Forbye, I see there's a lady in the case, and I deem it my duty to assist you.'

I was at first astonished by the man's ready compliance; but when I saw that he was sincere I thanked him to the best of my power. 'Be sure I shall not forget this service, Captain Steen,' said I, 'and if it is ever in my power to serve you in return you may count on me. You will take some refreshment before you go?' and calling Nicol I bade him see to the stranger's wants.

Meantime it behoved me to be up and doing if I was to sail that night. I knew not what to think of the news I had heard, for as I thought upon the matter it seemed so incredible that aught could have gone wrong that I began to set it all down to mere loneliness and a girl's humours. The strangeness of the letter I explained with all the sophistry of care. She did not wish to disturb me and bring me home before my time. This was what she meant when she said she was not free to write her will. But at the end her desolateness had overmastered her, and she had finished with a piteous appeal. Even so I began to reason, and this casuistry put me in a more hopeful frame of mind. It was right that I should go home, but when I got there I should find no cause for fear. But there was much to be done in the town and the college ere I could take my departure. So, when I had paid all the monies that I owed, and bidden farewell to all my friends (among whom Sir William Crichton and Master Quellinus were greatly affected), I returned to my lodgings. There I found Nicol in great glee preparing my baggage. He was whistling the 'Lawlands of Holland,' and every now and then he would stop to address himself. 'Ye're gaun hame,' I heard him saving, 'ye're gaun hame to the hills and the bonny water o' Tweed, and guid kindly Scots folk after thae frostit Hollanders, and fine tasty parritch and honest whisky after the abominable meats and drinks o' this stawsome hole. And ye'd better watch your steps, Nicol Plenderleith, my man, I'm tellin' ye, and keep a calm sough, for there's a heap o' wark to be dune, and some o' it geyan wanchancy.'

'Good advice, Nicol,' said I, breaking in upon him. 'See that you keep to it.'

'Is that you, Maister John? Ye'll be clean high about gaun back. And ye maun mind and put a bottle o' French brandy in your valise, or you'll be awfu' out on the sea. I think it's likely to be coorse on the water.'

I took my servant's advice; and when all was done to my liking I walked down to the college

gate for one last look at the place. I was in a strange temper—partly glad, partly sad, and wholly excited. When I looked on the gray, peaceful walls, breathing learning and repose, and thought of the wise men who had lived there, and the great books that had been written, and the high thoughts that had been born, I felt a keen pang of regret.

As I left the place there was a cool gray haze over all the gardens and towers, mellow and soft and lucid. But to the north, where lay the sea, there was a broken sky, blue, with fitful clouds passing athwart. It seemed, as it were, the emblem of my life—the tranquil and the unsettled. Yet, in the broken sky there was a promise of sunshine and brilliance, which was not in the even gray; and this mightily heartened me.

So at four that evening we mounted horse and rode forth by the way we had come; and ere the hour of eleven were on the wharf at Rotterdam, sniffing the distant smell of the sea. Captain Steen met me on deck, and greeted me heartily; and soon we dropped down the estuary and set our face seawards.

Of my voyage home I do not purpose to tell at length. On it I met with none of the mishaps which I had encountered before, and the captain I found a friendly, talkative man; from him I had much news of the state of the land whither I was returning. Nor was it of such a sort as to elate me, for it seemed as if in the short time I had been away things had taken many steps to the devil; but my time during the days of our sailing was in the main taken up with thoughts of Marjory. The word I had got still rankled in my mind, and I puzzled my brains with a thousand guesses as to its purport. But as the hours passed this thought grew less vexatious, for was not I on my way home to see my love once more, to help her in perplexity, and by God's help to leave her side never again? Every thought of home made it doubly dear to me. And, more than all else, there was my lady awaiting me, looking for the sight of my horse's head at the long avenue of Dawyck.

Then I fell to thinking of the house of Barns, and of the many things which I should do were I home. There was much need of change in the rooms, which had scarce been touched for years.

Also I figured to myself the study I should make and the books which were to fill it. Then, out of doors there was need of planting on the hillsides and thinning in the haugh-lands; and I swore I should have a new cauld made in Tweed above the island for the sake of the fishing. All this and more should I do 'when I rode through Annan Water wi' my bonny bands again.'

We left Rotterdam on the evening of one day, and sailed throughout the day following; and, since we had a fair wind and a stout ship, about noon on the next we rounded the Bass, and entered the Forth. I was filled with great gladness to see my native land once more; and, as for my servant, I could scarce prevail upon him to keep from flinging his hat into the sea or climbing to the masthead in the excess of his delight. The blue Lomonds of Fife, the long ridge of the Lammermoors, and the great battlements of the Pentlands were to me like honey in the mouth, so long had I been used to flat lands. And beyond them I saw the line of the Moorfoots, ending in Dundreich, which is a hill not five miles from the town of Peebles.

About three of the clock we entered Leith Roads and awaited the signals for admission. 'The Seamaw lies at the wast harbour for usual,' said the captain; 'but there's something wrong thereaways the day, so we maun e'en run into the east.' So soon, amid a throng of barques at anchor and small boats moving to and fro among them, we steered our course and in a very little lay against the gray sea-washed walls of the east quay. There we landed after bidding farewell to the captain; and as my feet touched the wellworn cobble-stones, and I smelt the smell of tar and herrings, I knew my own land. The broad twang of the fishermen, the shrill yatter of the fishwives, the look of the black, red-tiled houses and the spires of the kirks-all was so familiar that it went straight to my heart; and it was with a cheerful spirit that, followed by my servant. I made for the inn of 'The Three Herrings,' where I purposed to sleep the night ere I rode to Tweeddale on the morrow. So much for man's devices : this was to be to me the last day of quiet life for many months. But as I briskly strode along the harbour walk, little I foresaw of the dangers and troubles which awaited my coming.

MINE-SALTING.



HAT is known as the 'salting' of mines is much more common than most people imagine. It is practised in every mining district in the world with more or less success, and it is hardly too much to say that

fully ten per cent. of the foreign and colonial mines sold to London companies are purchased

on salted workings or samples. The methods of salting adopted are almost as various as the mines doctored. The simplest, and probably one of the earliest means of salting in the case of goldmines, is what is known as the 'nail trick.' In this, the prospector, who is washing a dish of alluvial or crushed quartz, has concealed in his finger-nails some fine particles of gold. Soon

after starting to wash he finds it necessary to puddle the dirt with his hands in order to break up the clayey substances, and of course while he is puddling, the gold is freed and goes into the prospect, eventually making that pretty 'corner' which the speculator so likes to see. Perhaps, however, the nefarious prospector has his nails too short for this trick, and he will then resort to the expedient of shooting fine gold into the dish from his mouth whenever he gets an opportunity of doing so without being observed. Or he will raise a hand to put his hat straight, and at the same time shake into the dish some gold-dust from his hair. But sometimes the speculator or expert present, whose good opinion of the property is wanted, resolves to wash a dish or two himself; and then the prospector has to resort to other tactics. He will, however, probably have provided for the contingency, and will be pretty sure to find some means of salting the new sample or the dish before the water touches it. Supposing that circumstances are against him in this, then he will have recourse to a pipe or cigar properly prepared for the occasion. The chances are that the washer will not notice the apparently accidental falling of tobacco-ash into his dish, and the trick will have

The salting of prospects while under process of dishing is, however, fast dying out, prospectors preferring the more solid business of salting the earth or rock as it lies in situ, or of bringing stone from other mines and preparing an ingenious pack. Formerly the most common method of salting a barren reef was to fire golddust into it from a shot-gun; and many a mine has been sold for a good figure on the strength of a reef faked in this way. But the shooting process is unsatisfactory for many reasons. In the first place, it only answers at all for certain classes of rock; then the reef into which gold has been fired has a patchy appearance, which is not a favourable sign; and again much of the gold fired is lost, while the explosion of the gun in a narrow drive or crosscut is liable to bring down a lot of the ground. All these are serious objections; but what chiefly brought the shooting practice into disrepute among salters was the fact that the prospective buyers of the mines, or their representatives, gradually became suspicious of fair faces, and often insisted upon taking their samples a foot or so back from the face. The biggest coup on record effected by the shooting trick was brought off in Tasmania, where nearly half an acre of sandstone was fusiladed, and a great deal of money made by the salters, the purchasers believing that they had really acquired the biggest gold-mine in the world.

The art of salting is carried to its highest pitch of perfection in the process known as 'stacking.' This is performed by building up a portion of a reef at the end of a drive which has been run underground along the line of the reef. Of course the built-up portion must be made to look like unbroken ground; but this is sometimes a most difficult task to accomplish. Luckily, however, for the salters, few of the best goldreefs are without very numerous fractures, and indeed they not infrequently look like bands of mullock held together by a clayey substance impregnated with iron oxide. Such reefs, which are not uncommon in Western Australia, are much easier to imitate than the hard white reefs of Ballarat or the wide gold bands of South Africa. Usually the stacking has a depth of from four to five feet, though in exceptional cases it is considerably greater. A well-known London mining engineer discovered a depth of no less than ten feet in a stack prepared for him in Colorado. It need hardly be said that when only the end of a drive is stacked, it is found necessary to timber the roof and keep a judicious supply of water and loose planks on the floor, while of course the original reef is taken out for its entire width. Past masters in the art of stacking hail usually from the States, but Australia has produced two or three prime examples.

Stacking is usually performed in isolated mines. where the operations of the salters are not likely to be watched or interrupted. In cases where there are several mines in the same neighbourhood, the salter generally resorts to doctoring the expert's samples, after perhaps judiciously peppering the workings with damp gold - dust. Occasionally the expert is one who treats every man at a mine as a possible salter, and hence successfully guards his samples; but usually he takes only ordinary precautions, which are of no earthly avail against an experienced salter. If he sends his samples up the shaft open in a bucket, having some one on the surface to look after them, gold-dust is blown into it from an intermediary drive as it is rising, or gently let fall into it from the top just as it reaches the brace. If the expert takes his sample bags down the shaft, with the intention of sealing them up underground, he will not notice with the falling dust from the top and sides of the shaft a fine shower of gold-dust following him down, lodging on his hat and over his clothes; and if for one minute he loses sight of those sample bags when he has returned to the surface, they will be judiciously primed by means of sharp injectors, which leave no trace of their work. Of course all this is supposing a salter is on the watch.

Should the salter fail altogether to tamper with the samples, or to deceive the expert underground, his only chance is to fake the samples at the assay office to which they are taken. This requires a confederate, and is usually very difficult; but it has been done successfully many times. In one case - the St George mine in Australia - the culprit was discovered, and he received two years' imprisonment; but meantime he had cleared a few thousands of

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Sometimes it happens that a really good property is salted. Thus one of the large mines now working at Broken Hill, and which has turned out an enormous quantity of silver and lead, was originally sold on a salt of several tons of ore conveyed from a neighbouring mine, and carefully stacked about an outcrop. In New South Wales a gold-mine that paid dividends for years was sold in the same way. On the faith of the promising 'surface show,' a shaft was sunk, and at about two hundred feet a splendid body of auriferous stone was struck. In Tasmania an alluvial tin-mine which had been salted led the purchasers to the discovery of a gold-reef which amply repaid them for their outlay.

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One of the most notable Australian salting cases was that connected with the Boomerang mine in South Australia. The culprit, whose name was Marshall, went to work in quite an extensive way, spending a great deal of time and a considerable sum of money in manipulating the venture. He selected a spot of barren mineral country in the Flinders Range, about thirty miles from a habitation, and having pegged out over a hundred acres of ground, he sunk three shafts to a depth of about sixty feet each. He then sent up from Adelaide a party of surveyors, and had elaborate plans drawn showing a systematic series of huge silver lodes; and experts were obtained to give most elaborate and highly-coloured reports upon the property, with the usual lists of remarkable assays of samples 'carefully taken' from the shafts. In fact the Boomerang was reported to be quite equal to the great Broken Hill mine in its initial stage. Armed with his large coloured plans and voluminous reports, Marshall then set about reaping his harvest. He first went to Adelaide, and in a few days sold various small interests in the Boomerang for a total of £1100; then proceeded to Melbourne, where he sold two-sixteenths for £3000 each, and a thirty-second for £1250; and wound up in Sydney, whence, having cleared £2500 more, he took ship under an assumed name for San Francisco. The development of mines is slow work, and it was a couple of months before the purchasers of shares in the Boomerang commenced to wonder why they heard nothing more of the mine. Then of course the swindle was uncovered, but it was too late to get back either Marshall or the money.

The colony of Victoria had a very bad case of salting exposed last year. About three years ago, a certain 'Colonel Morgan' (the title American), who was formerly at Broken Hill, and before that in Nevada, U.S.A., was sent to take charge of a reported valuable silver and lead mine in Gippsland owned by a Melbourne company. The colonel sent down from time to time glowing reports upon the mine, and after some months a few tons of silver-lead ore were forwarded to Melbourne from the property, and sold at a satisfactory price, Strange to say, however, the regular delivery of ore was not maintained, but the colonel explained this by reporting that though there were immense bodies of ore practically exposed,

yet the mine wanted properly opening up before the ore could be dealt with on a large scale. Time went on, and funds giving out, the company was reorganised; the splendid reports of the work in hand which reached Melbourne every fortnight rendering it easy to obtain fresh capital. Then one fine day the colonel reported that the mine was sufficiently developed for the erection of machinery, and the directors were specially asked to visit it and see for themselves what a magnificent property they had. The journey was long and difficult; but the visiting party from Melbourne felt themselves well rewarded for their trouble when they examined the workings, and saw on all sides of them, and overhead, and underfoot, magnificent carbonate and sulphide of lead ore rich in silver. In every place exposed there was ore, and judging from appearances there was practically an unlimited supply. The directors returned to town highly pleased, and at once made arrangements for the erection on the mine of concentrating and other machinery. Meanwhile the shares of the company rose high in the market, the result of the directors' visit having become widely known. But suddenly, just when the machinery orders had been placed, it was discovered that the colonel was missing, and that he had sold all his shares, his holding having been pretty large. The reason was immediately forthcoming, for an overseer at the mine confessed, under promise of freedom from prosecution, that he had been a confederate of the colonel in 'stacking' the mine. It turned out that there was actually some ore there, though only a few bunches, and this had been used by the colonel in packing the sides and floors of the workings. It took him many months to do the work, as there was a lot of trouble in procuring sufficient ore, and it is no easy task to pack a drive; but he was eminently successful, as has been seen. It is hardly necessary to add that the colonel has not been heard of since.

Over three hundred ounces of gold were used to salt a mine in New South Wales some few years ago, with the result that the property was purchased by a Sydney syndicate for £30,000. So well was the salting done that expert after expert was deceived, and it was not until the market price of the syndicate shares totalled over £400,000 that the property was proved to have been 'prepared.' The discovery of this fraud gave a blow to mining in New South Wales from which it took a long time to recover



THE FRENCH AT LAKE CHAD.



HERE is a fascination about the internal lakes of Africa far out of proportion to their value in a commercial sense as waterways. Not only is this the case with the great equatorial lakes, but far away

to the north-west, on the borders of the waterless Sahara, Lake Chad has drawn the attention of explorers since the famous journeys of Barth and Nachtigal. Especially has the region had an attraction for our immediate neighbours across the Channel, who have long wished to make of the Chad a French lake. French ambition, in fact, has gone so far as to contemplate the possession of practically the whole of North Africa. But it was not to be expected that the other powers, which have been scrambling for and cutting up the Dark Continent, should acquiesce in this; and the agreements which have delimited the 'spheres of influence' of Great Britain, France, and Germany have brought each of the three nations into touch with the lake. By the agreement of August 1890, the English sphere extends along the west side of the lake southwards from Barua, a place of no importance and now in ruins, which our diplomatists 'in their wisdom' for some reason fixed upon; whilst by a treaty with Germany (15th November 1893), the eastern frontier of the English sphere touches the lake at a supposititious point thirty-seven minutes to the east of the meridian of Kuka, or in longitude fourteen degrees east. The Franco-German boundary (agreement of 4th February 1894) to the east is equally absurd, except so far as it takes the river Shari for the dividing line. No regard is had in this ridiculous arrangement for the political divisions of the native states.

So far as Germany is concerned, the frontage on the lake seems to be a matter of sentiment, for no expedition has yet been sent so far as its shores. From our own Niger possessions an attempt was made in 1889 to open up communication with the lake, when Sir Claude Macdonald was sent by the British government on a mission to the Niger. Starting from Akassa on 26th July, Sir C. Macdonald ascended the Niger and Benuë in the river-steamer Boussa, his plan being to steam as quickly as possible to the highest navigable point on the Benuë River (some nine hundred miles from the sea), thence to make a dash in a small launch up the Kebbi River and endeavour to find a waterway to Lake Chad. (See Mockler-Ferryman's Up the Niger, 1892.)

The Boussa drew six feet of water, and in this Sir Claude Macdonald was able to get as far as Garua, the highest trading station of the Royal Niger Company, some distance above Yola. Here the steamer was left, and the farther ascent was made in a steam-launch drawing only fifteen inches of water. Some ten or twenty miles above Garua, the Benuë receives from the north-east a considerable stream, known as the Kebbi River, which has a width of about two hundred and fifty yards at the junction. Native reports, partly confirmed by Barth, were to the effect that by ascending the Kebbi the Tuburi marshes would be reached, and that in the wet season these marshes communicated with the river of Logon, which flowed into the Shari and then into Lake Chad. The object therefore was to test the supposed waterway from the Benuë to Lake Chad, the course of the Kebbi having hitherto been unexplored.

The third day's steaming brought the little vessel to an open expanse of water, some three miles long by a mile and a half in width, called by the natives Habarat. Hippopotami were splash ing about, but a swamp and the high rushes prevented the steamer from approaching the native town on the north shore, and the natives were too timid to approach close in their little canoes. The town was of considerable size and built of quadrangular mud huts, and was afterwards discovered to be named Bifara or Bipara. For some time search failed to find a channel leading beyond this lake, and it almost looked as if the lake was itself the source of the river. After one or two unsuccessful attempts to open up communication with the naked natives on the south shore, who entered the water brandishing their spears above their heads, an interpreter succeeded in gaining their confidence with a present of cloth, and one of the elders of the tribe was persuaded to come on board the little craft and act as pilot on the promise of a liberal present. The naked old savage fairly shivered with fright as he crawled on deck, and never relinquished his hold of a bundle of villainous-looking spears. Dozens of little canoes followed in case of treachery, as the steamer passed into a deep and winding channel, some twenty yards in width, flowing between banks thickly planted with dhurra. But after a few miles of difficult navigation, the length of the launch (sixty feet) prevented its rounding the sharp bends of the stream, the bows frequently running on one bank whilst the rudder suffered from violent contact with the other. This was disappointing, especially as the guide said they would find a little farther broader water again and be able to arrive at a large town called Lere, some twenty miles higher up the stream. There was nothing for it but to turn back, though turn they literally could not in a stream less in width than half the length of the boat, and it was necessary to let the launch drift down, stern foremost, with the current, all hands standing ready with poles to shove off as it bumped against the banks. It was now the height of the rainy season, the volume of water was inconsiderable, and it was evident that the stream farther would not be practicable for commercial purposes.

More active and persevering attempts to reach Lake Chad have been made by the French from their possessions on the Lower Congo and in the Western Soudan. From the former M. Fourneau ascended the Sanga River and its tributary the Masa in 1891; and farther to the eastward M. Paul Crampel in the same year reached as far as El Kuti, south of Wadai, where he was made prisoner by the sultan and handed over to the adventurer Rabah, together with one hundred and fifty Martini rifles which he had with him. Crampel and many of his men died of fever. M. Jean Dybowski was sent out to ascertain his fate and to punish the evildoers. Starting from Loango, he crossed to Stanley Pool, then ascended the Congo and Ubangi to Bembe and pushed northward through a country rendered difficult through heavy rains until he reached the upper Shari, when want of provisions compelled him to retrace his steps.

A far more important and successful journey was made from Senegal by Lieut - Col. P. L. Monteil, who started from St Louis in 1890, and after reaching Lake Chad returned across the desert to Tripoli. The account of his journey was published in 1895 in a sumptuous quarto volume (De St Louis à Tripoli par le Lac Tchad).

The Anglo-French convention for the delimitation of the spheres of influence to the west of Lake Chad contained the provision: 'The Government recognises the sphere of France to the south of the Mediterranean up to a line from Say on the Niger to Barua on Lake Tchad, drawn in such a manner as to comprise in the sphere of action of the Royal Niger Company all that fairly belongs to the kingdom of Sokoto.' This convention was signed on 5th August 1890, and on the following day Monteil was commissioned to explore this Say-Barua line, with him ten Senegalese soldiers and a French non-commissioned officer, he on 9th October set out for the interior from St Louis, going by water up the Senegal River to Kayes, the chief town of the French Soudan. From there he travelled overland to the Niger, which he reached at Bamaku. Until beyond Segu he was still within the territory effectually held by the French government, Segu having been taken from Ahmadu by Colonel Archinard only a few months before. From Segu it was Monteil's intention to cross what the French call the buckle of the Niger-that is the land within the great bend-direct to Say. But the country was now much disturbed by the war between the French and the Fulah or Toucouleur leader, Ahmadu, and it was necessary to make a considerable detour to the south by way of Sikasso. From here he again turned his steps eastward, signing treaties with the fama (king) of Bussura, in the Bobo country, and the Almamy of Lanfiera, in Dafina—placing their territories under the French protectorate. Near Lanfiera he crossed the upper waters of the Volta, which was here about forty yards wide and about six feet deep.

At Wagadugu, the capital of Mossi, where he arrived on 28th April 1891, he met with a different reception. The Almamy, whose predecessor had shown himself hostile when Dr Crozat visited the town in the previous year, had recently returned from a pilgrimage to Mecca. Mossi is an important negro state which has not only preserved its independence, but possesses an ancient negro civilisation, differing in this respect from the barbarism which elsewhere attaches to negro institutions. Tradition carries back the origin of the royal family of Mossi to the creation of the world. The first Naba (king) had three hundred and thirty - three children, amongst whom he divided his country on his death, and it is said that this division exists to the present day! The government of the country is well organised, under a number of nabas, all subservient to the Naba of Wagadugu, who takes the title of Naba of Nabas, though his authority is little more than nominal. The country is settled, prosperous and peaceful, and is, Monteil says, the one country of the Soudan where the villages are not fortified. Millet, haricots, cotton, and indigo are cultivated, and the people possess fine horses and donkeys. Weaving is carried on, and the cotton cloths of Mossi are valued throughout the Soudan. It is in Mossi also that are found the cowrie shells which form the medium of exchange in the Soudan. Prosperous and free from outside domination as they were, therefore it is not to be wondered at that the rulers of Mossi resented the intrusion of foreigners. Accordingly the Almany soon brought Monteil an order from the Naba of Nabas to leave Wagadugu at once, and by the way he had come. In vain did the traveller represent that he was an envoy from the French government, and had presents for the The only reply was: 'It is the king's And the little party was escorted for some distance along the road it had come, by the men of Mossi, in drenching rain.

Turning more to the northward, Monteil pushed on towards Say, signing treaties with the Fulah Emir of Liptako, and the avaricious king of Zebba, in the Yagha country. At Nadiango, in the Torodi country, the king refused to see him and would have nothing to do with a treaty; but Ibrahima, king of Ouro-Gueladjio, who is said to be the paramount Fulah chief of the country between Say and Liptako, was more amenable, and he accepted a treaty of protectorate (12th August 1891). Seven days later the Niger was reached at Say, where the king also accepted the protectorate as a matter of course. Say is not a town of great commercial importance.

From this point Monteil was entering on the territory which the Anglo-French treaty referred to; and it was generally understood that the countries to the eastward were comprised in the Fulah empire of Sokoto. Not so, says Colonel Monteil, with regard to the districts between Say and the town of Sokoto. Between these two points there are or were, it seems, three states: Djerma, Mauri, and Kabbi, whilst to the south of these is Dendi. Djerma and Dendi are peopled by the Sonrhai (Songhay) race; Mauri and Kabbi by Hausas. The chiefs of these states, whilst independent of each other, recognised the sovereignty of the king of Kabbi. They had been free from the domination of the Emperor of Sokoto for thirty years, and had long proved a thorn in the side of the latter, so that a few months after Monteil's visit the Emperor of Sokoto entered into league with Ibrahima Gueladjio against them, and whilst the former took Argungu the latter took possession of Djerma and Mauri. This took place in the early months of 1892. Monteil considered himself free to negotiate with these states, but the kings of Djerma and of Kabbi would have nothing to do with treaties. At Mauri permission for the travellers to pass through the country was made to depend on the result of a raid by the king against Gandé. As he returned from this raid with a booty of six hundred captives, Monteil was allowed to proceed without molestation.

It was not until within a few stages west of the town that Monteil entered the territory of the powerful Emperor of Sokoto. At the capital he was favourably received by the emperor, who had just succeeded to the throne, and was induced to sign a treaty, although, unknown to him, a treaty had been signed in the preceeding year (1890) between his immediate predecessor and the Royal Niger Company, besides one entered into with Mr Joseph Thomson in 1885. From here Monteil travelled by way of Gandi to Kano, the most important town of the central Soudan. Here he was detained three and a half months, and the king of Kano tried to dissuade him from going to Kuka, the capital of Bornu, telling him that a white man had been sent back from there. This, it afterwards turned out, was Mr Charles Mackintosh, a representative of the Royal Niger Company. Monteil learned that Mackintosh had been turned back from Kuka because he had arrived there without asking permission to enter the town, perhaps also because the Arabs were afraid the whites would take away their trade.

From Kano, Monteil reached Madia, the first village in Bornu, by a route, previously unexplored, between those of Clapperton and Barth. The villages passed by the earlier travellers had in many cases been removed to other situations owing to want of water. Monteil was received with evident want of cordiality by the Ghaladima (king),

who was next in power to the Sheik, but was given permission to approach the capital. On arrival at Kuka (9th April 1892), he was met by a body of one hundred and fifty horsemen dressed in coats of mail, who rushed up to him lance in hand, only halting when their weapons were within a few inches of his face and breast. This trying and dangerous ordeal, it turned out, was intended as a great honour. Then the horsemen turned round and escorted him to the gates of the town, where his entry was witnessed by forty thousand people. A day or two after, he was received in grand audience by the Sheik. Having no letter of authorisation, he with a Frenchman's readiness concocted one, which, being in French, no one could read, so that the fraud escaped detection. Here, as everywhere, he had to make numerous presents to the Sheik.

Monteil, unlike Mackintosh, found it easier to get into Kuka than to get out. Desiring to return by way of Tripoli, the Sheik gave his consent for him to do so, but it was three and a half months before he succeeded in leaving the town. It soon became evident that the policy of delay was indulged in with a view to fleecing the travellers. But the day at last came, and on 15th August he set out with a caravan which was returning to Murzuk. Then came the weary ride across the waterless desert, trying alike to man and beast. It was with quite a relief that he again came upon the signs of civilisation. At Murzuk he was comfortably lodged in the house which had been occupied in 1870 by the unfortunate Miss Tinné, whose murder, he learned, was not due to the Tuaregs, as generally supposed, but to an Arab of the Oulad-bon-Sef tribe, named Ethmann-bonn-Badia, who in his turn deservedly met with a violent death twenty years later. Here the Turks have a garrison of five hundred men, and here also Monteil saw a number of Cretan, Armenian, Albanian, and Servian Christian prisoners, who had been sentenced to transportation.

On 10th December 1892, Colonel Monteil was welcomed at Tripoli by the French consul after a journey across the desert of nearly four months, and after carrying out successfully the boast with which he started, 'With ten armed men I could cross Africa.'

It was reported at the end of last year that a French vessel had been afloat on the waters of Lake Chad. M. Gentil in 1896 proceeded to the Shari basin by way of the Ubangi, taking with him a small steamer in sections to place upon the former river. He reached the Nana, a southern tributary of the Shari, and his steamer, the Léon Blot, had been put together on the river, and in May last started on its voyage to the lake. A letter, dated July 25, 1897, from a Frenchman in Upper Egypt, announced that the Léon Blot had reached Lake Chad. 'We may be proud of that,' said the writer; 'it is the first vessel afloat on the mysterious lake, and it is a French boat.'

BORING OIL-WELLS IN THE SEA.



CCORDING to the Scientific American, the early settlers in California were familiar with indications of the existence of oil which were seen at various points along the coast, while asphaltum, which oozed up

from beds at the bottom of the sea, formed an important factor in the household economy of the aborigines, and in almost every burial-place on the coast asphaltum is found. The natives employed it to mend objects which were broken and as a base in which to place ornamental pieces of pearl mosaic. Baskets were fastened to ollas or jars by this means, and it was used for endless purposes in lieu of nails, cordage, and glue. The natives on the islands obtained their supply from the water, and at the present day the rocks at various places can be seen splashed with asphaltum which has drifted in. This is particularly noticeable after an east wind, showing that there is a large area in the deep Santa Catalina channel from which asphaltum oozes up. Off Redondo beach, in Los Angeles County, it is extremely troublesome, oozing out of the sand off-shore and drifting in. Between Santa Monica and Los Angeles there are undoubted deposits, and north of Santa Barbara several enormous ones. That owned by the More estate extends some distance along the shore, so that vessels are run in, and the asphaltum is shovelled on board. The quality of this asphaltum is stated to be equal to that of Trinidad.

Oil-wells were sunk at Santa Paula some years ago; and, later, an oil-producing belt was discovered at Puente, and again at Summerland. below Santa Barbara, where a singular state of affairs exists. It soon became apparent at the latter locality that the oil-bearing stratum stretched out into the sea, and drill scaffolding, looking like windmills without sails, began in a short time to extend down the little canon, and to creep up the shore in the direction of Santa Barbara. At first they kept along the sides of the hills which breast the sea there; but gradually they turned seawards, until one more adventurous than the rest rose from the water. Work was started at an extremely low tide, and finally the tall scaffolding appeared twenty or thirty feet from the shore, rising from the sea. At present there are three borings, which even at low-tide are in the water, but at flood-tide are completely surrounded, the men working on platforms of various heights, which they successively ascend as the sea rises. So far the structures that have been built in the sea have not yet experienced a strong south-wester; but, as some of them stand in six feet or more of water at high-tide, in a severe storm their existence will become precarious. The drills are worked in the water from

an engine on the beach, the fuel being the oil pumped up. This is probably the only place where oil is pumped out of the sea, but undoubtedly the entire coast overlies an oil-producing stratum. Off what is known as More's Wharf, half-a-mile out, oil rises to the surface in several places. A spring of fresh water also rushes up there with such velocity that it can be taken up and used if the slightly brackish taste is not objected to. A similar spring is known to exist on the Florida coast, where, it is said, a vessel can lie alongside the great rush of water and fill her tanks with fresh drinking-water out of the ocean.

Probably one of the strangest sights in oilwells is seen at Los Angeles. There oil was first discovered in the western district, the choice residential part of the city; but, like magic, the lighthouse-like scaffoldings began to rise until the place appeared fairly to bristle with them. Fine residences were ruined by the proximity of the unsightly objects; and, finally, the whole place was given over to the oil-drills, and at present it resembles certain portions of the oil-region of Pennsylvania. The borings have advanced in a well-defined north-easterly direction, and at present appear to be stopped by the large Catholic cemetery, which overlies the oil stratum. Not far distant is the Los Angeles River, which probably will ultimately be encroached upon and made to give up its hidden riches. The discovery of oil in and about Los Angeles promises soon to supply the long-wished-for power required for manufacturing purposes. The Terminal Railroad has adopted the oil as fuel, and the Southern Pacific is said to be experimenting in the same direction. California is without deposits of coal, if we except lignite beds which crop out in various places, so that oil as a fuel will supply a want long felt at Los Angeles, and become a factor in the rapid development of this growing city.

PERCHANCE.

PERCHANGE some day, when twilight-tide has crept Across the fens and widening willow-ways, You will recall those days when passion slept Unwakened by the kiss that thrills and slays; You will look forth across the northern sea And hear its thunder beating towards the bay, And think of all our love that used to be,

Perchance some day.

Perchance some day, when slowly in the east
The dim, drear dawn is breaking—and the hum
Of busy feet is hushed—of me, the least
Of all your lovers, hallowed thoughts will come.
And I shall dream, and see you—eyes that yearn
Will gaze in yours—our hands will clasp and stay.
And so by spirit-paths you will return
To me—some day.

WALTER THACKWELL.



LOOKOUT MOUNTAIN, TENNESSEE.



OOKOUT MOUNTAIN stands in the midst of one of the most historic spots in the United States, and is itself historic. It was our good fortune to visit it a few weeks ago, and it is now our plea-

sure to write of it. We cannot do the famous old landmark justice, but we can introduce it to many who may never have heard of its existence. Travellers cross oceans, dare extreme perils, undergo discomforts in far lands to catch a glimpse of beauty in a sunrise or a sunset, a cataract or a lake, in snowcapped mountains or in a glacier, and yet leave as much, or more, beauty at home. How applicable this sentiment is to the thousands of Americans who travel away from home in every part of the globe none knows better than the writer. There is no country on earth so rich in natural beauty as the United States; and let the eager eye of the child of Uncle Sam rest on beauty of whatsoever sort it may, yet no human eye will ever compass as much beauty of earth and sky as that to be found in and around old Chattanooga, Tennessee.

Our starting-point was Cincinnati. All along our route south the scenery was quite remarkable. Innumerable lakelets smiled, grave mountains frowned, and bonny rivers laughed, while high bridges awed, and dark tunnels thundered at us, just as it were to make monotony impossible and our enjoyment supreme. After leaving Ohio a run of twelve hours found us at our destination—Chattanooga. The celebrated mountain lies north-west of the picturesque old city.

Early on the morning after our arrival we bestirred ourselves to get the first view of Lookout Mountain. How admiringly did we linger and try to realise his splendid proportions; and how eager we were to scale his almost perpendicular sides! This feat we literally accomplished later in the day. Taking a street car in Chattanooga, a very brief ride brought us to the base of the mountain and to the station of the newest route to the summit. From the foot

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to the crest by this incline is about one mile. The journey up and down is one of great interest, especially if the traveller be careful to look up. But should he chance to turn his eyes down or across or anywhere but up, he will experience a feeling quite akin to terror, and obtain a view that will certainly impress him. Sheer precipitousness and perpendicularity could go no further. Enough to turn the head of the most tried and thrill the heart of the stoutest and bravest. No admirer, however, of the grand old hill ought to neglect this incline, a wonderful triumph, surely, of human skill. The trip up and down only costs thirty cents; and heroism could not be purchased more cheaply.

The view to be had from the point of arrival at the top of the incline where stands Lookout Inn (a very fine hotel, by the way) is superb. At the time of our visit a quite perceptible haze dimmed the atmosphere; but in spite of this, 'The Preacher,' a young negro guide, pointed out to us no less than seven states, as follows: Tennessee, in which we stood; to the left, Kentucky and Virginia; before us, the Carolinas; to the right, Georgia; and behind, Alabama. In the nearer distance we were able to discern many points of deep historic interest; the battle-ground of Wauhatchee, where a terrific battle was fought between the Union and Confederate troops on October 24, 1863; Orchard Knob, the scene of the second day's battle of Chattanooga, and the headquarters for a time of Generals Grant and Thomas; the whole sweep of Missionary Ridge, where thousands fell; Rossville Gap, through which the Union forces retired to Chattanooga on the evening of the 21st October, after heavy fighting; and the National Cemetery, where lie thirteen thousand heroes, the headstones of five thousand of whom are marked 'Unknown.' Before us lay the still more famous battlefield of Chickamauga, where in a conflict of not quite two days sixty thousand fell. We must also make mention of the fine view we enjoyed of the most famous part of the noble Tennessee River known [All Right's Reserved.] MARCH 12, 1898.

as Moccasin Bend, whose configuration answers exactly to the name it bears. Away to the left of us, after changing our position to Sunset Rock, waves of earth stood still as if in mute amazement at the supreme beauty of which they were, unconsciously, a part, crowned with a luxuriant growth of trees whose changing tints contributed generously to the rare loveliness of that which we beheld. 'Surely,' we mused, 'there is not upon this earth aught grander than this.' Indeed, in the judgment of one of the most travelled of our party, there is not. The mountains of Europe have a charm that is all their own; but he conveyed no disparagement of them when declaring that the view from Lookout Mountain exceeded anything of a similar nature he had seen in Europe. The same has been said of the mountain by all other travellers who have stood on its summit.

Lookout Mountain is seventy-five miles long, terminating abruptly at Chattanooga on the north, and Attalla (Alabama) on the south, crossing the north-west corner of Georgia. Its summit is a

tableland, rather narrow for twenty-five miles at the north, and widening out to nine miles where it crosses the Georgia and Alabama line. The crest of the tableland is bounded by precipices for almost its whole length. As we stood gazing upon the craggy face of the mountain we wondered at the bravery and stout-heartedness of those who, upon its slopes, could and did carry on a brilliant fight for home and country and freedom. The advance of an army up its western slope, as one has well said, is a never-ending source of wonder. That a line of battle could have been maintained seems incredible. In his report of the Battle of Lookout Mountain, General Hooker says: 'Viewed from whatever point, Lookout Mountain, with its high palisaded crest, and its steep, rugged, rocky, and deeply-furrowed slopes, presented an imposing barrier to our advance; and when to these natural obstacles were added almost insurmountable, wellplanned and well-constructed defences, held by Americans, the assault became an enterprise worthy of the ambition and renown of the troops to whom it was intrusted.'

JOHN BURNET OF BARNS.

CHAPTER XVIII .- THE PIER O' LEITH.



HEN I came to the door of the 'Three Herrings' I presented an imposing sight, with Nicol at my side and two sailors at my back with my baggage. The landlord made me a civil greeting and

placed his hostel at my service, opining that I was a stranger of consequence just come from abroad. So, bidding my servant settle with the men, I followed my host upstairs to a room where a fire was burning and some refreshment laid on the table.

An excellent supper was brought, on which I fell like a hawk, for the sea air had sharpened my hunger, and landward dishes are better than the meat of a ship. I bade the landlord let no one enter save my servant, for that I desired to be alone. Then I fell to summing up my monies and various calculations of a like nature which it was proper to make on my return; and, finally, I pushed away my chair from the table, and, filling my glass, gave myself up to pleasing fancies.

It was near the darkening, as I saw from the window which opened on the back yard, and which at that hour was filled with the red glow of sunset. The chimneys on the tall houses rose like spikes into the still air; and somewhere in the place a bell was ringing for I know not what. Below, in the room, I heard many mingled voices and a high imperious tone, as of one accustomed to authority. I guessed that some body of soldiers was filling the taproom.

By-and-by I began to wish for Nicol's presence, and to wonder at his long absence.

I was just approaching a state of irritation with my servant when the door was softly opened and the defaulter appeared. His face struck me with surprise; for, whereas for usual it was merry and careless, it was now filled with grave concernment. He closed the latch quietly behind him, and then slipped the bolt, locked the door, and pocketed the key.

I stared in silent amazement.

'If it comes to the warst,' he said, 'we can feelt for't.'

'What fooling is this?' said I. 'Tell me at once, and have done with it.'

'It's nae fooling, laird, as ye'll be finding oot. Sit still, for I've a long story to tell ye.' And, having first listened for a noise from below, he began his news, while I listened in much trepidation.

'I paid the men as ye tellt me, and syne I gaed doon to my cousin's shop i' the Rope-Walk just to speir if they were a' weel, and then I cam' back to the inn, thinkin' to get a bit quiet gless a' by mysel' i' the chimley-corner. But when I gaed into the room I fund it filled wi' nuckle sodger folk, drinkin' and sweerin' like deevils. And the first man I clappit een on was yin Jock Cadder, whate was yince a freend o' mine; so, sittin' doon aside Jock, I fell into crack.

'Weel, I hadna been there mony meenutes when I hears a loud voice frae the ither end ca'in' for a song. And anither voice answered, no' sae loud, but weak and thin. I jumpit up in

my seat, for the voices were weel kenned to me. And there I saw at the ither end o' the table your wanchancy cousin, the captain, sittin' glowrin' wi' his muckle een, and playin' wi' his gless. And aside him was nae ither than Maister Michael Veitch, him o' Dawyck, but no' like what he used to be, but a' red about the een and fozy about the face, like a man that's ower fond o' the bottle.'

My heart leaped with a sudden terror at the news. What on earth was Marjory's brother doing on the Pier o' Leith in the company of my most bitter foe? A great sense of coming ill hung over me as Nicol went on.

'Weel, I was astonished; and speaking quiet in Jock Cadder's ear I asks him what it meant, and what the twae were daein' here? And this is what I heard from him, for Jock never jaloused I had aught to dae wi' ye, but thocht I was aye the same and hide-i'-the-heather I had been afore. "When our captain cam' back frae furrin pairts," says he, "he gangs off to Tweeddale, your ain countryside, for it seems there's a lassie there he's awfu' fond o'. She's the dochter o' auld Veitch o' Dawyck, rich and by a' account terrible bonny. But she's trysted to the captain's cousin, Burnet o' Barns, what has been in Holland for mair nor a year. It's weel kenned that Maister Gilbert Burnet, when he gets a ploy intil his heid, never stops till he wins his purpose; so he sets himsel' to mak' love to the lass. And he couldna dae this unless he were weel in favour wi' her brother Michael, so he begins by winnin' him ower to his side. Noo, Michael Veitch (that's him up there) was aye uncommon fond o' wine and yill o' a' description, so the captain leads him on and on, by drinkin' wi' him at a' times, till noo the man is fair helpless. But this wasna a', for if John Burnet cam' hame and fund this gaun on he wad mak' a rare camsteery; and by a' accounts he's a stieve, dour chiel. So Maister Gilbert, whae's high in favour wi' the Privy Council, gangs and tells them o' some daeings o' his cousin's abroad, o' some hobnobbin' and plottin' wi' rebels and outlawed folk, and sending treasonable letters to this land under his name; so he gets a warrant for the lad's arrest as sume as he sets foot on Scots earth - and a'hody kens what that means, that he'll no' be troubled muckle mair wi' his cousin in this warld. That's the reason we're down here the day. We've had word that he's comin' ower i' the Seamaw, whilk lies at the Wast Harbour. We've been sendin' down word that last 'oors, but she 's no' in there yet, and 'ill no' be noo till the morn."

'That was what Jock Cadder tellt me, and I warrant I was in a fine fricht. It was clear the captain had nae mind o' me, for he lookit twae or three times my way and never changed his face. I slips oot the door wi'oot being noticed, and cam' up here wi' a' speed to tell ye the tale. So, laird, ye're in a close hole, and there's just

some auld wooden plankin' atween you and the Tolbooth.'

I cared little for the Tolbooth or anything else. One thing and one alone claimed all my attention. My whole soul was filled with a terror of anxiety, of mad jealousy, and desperate fear for my lady's sake. This was the cause of the letter, this the cause of her silence. I ground my teeth in helpless fury, and could have found it in my heart to rush down to Gilbert and choke the life in his throat. I was so appalled by the monstrousness of the thing that I could scarce think. My own danger was nothing; but that Marjory should be the sport of ruffians—the thing overpowered me. It was too fearsome, too monstrous.

One thing was clear-that I must go to her at once. If Gilbert Burnet was on the Pier o' Leith, Marjory Veitch at Dawyck would be quit of his company. Were I once there I could see her and perchance save her. I cannot write down my full trepidation. My fingers clutched at my coat and I could scarce keep my teeth from chattering. It was no fright that did it, but an awful sickening anxiety preying on my vitals. But with an effort I choked down my unrest, and centred all my thoughts on the present. Were I only in Tweeddale I might yet find a way out of the trouble. But woe's me for the change in my prospects. I had come home thinking in the pride of my heart to be welcomed by all and to cut a great figure in my own countryside; and, lo! I found myself an outlawed man, whose love was in peril, and whose own craig was none so sure. The sudden reverse all but turned my wits.

I walked to the window and looked down. The night was now dark, but below a glimmer from the taproom window lit the ground. It was a court paved with cobblestones from the beach, where stood one or two wagons, and at one end of which were the doors of a stable. Beyond that a sloping roof led to a high wall, at the back of which I guessed was a little wynd. Once I were there I might find my way through the back parts of Leith to the country, and borrow a horse and ride to Tweeddale. But all was hazardous and uncertain, and it seemed as if my chance of safety was small indeed. I could but try, and if I must perish, why then so it was fated to be.

'Nicol,' said I, 'bide here the night to keep off suspicion, and come on as soon as you can, for the days have come when I have much need of you.'

There's but as thing to be dune, to tak' to the hills; and if ye gang onywhere from the Cheviots to the Kells, Nicol Plenderleith 'ill be wi' ye, and ye need ha's nas fear. I'll e'en bide here, and if ye ever win to Dawyck I'll no' be lang abint ye. Oh, if I could only gang wi' ye! But if ye suffer aught, there'll be some o' His Majesty's dragoons that'll dree their weird.'

My servant spoke fiercely, and I was much

affected at the tenderness for me which it be-

'If I never see ye again, Nicol, you'll watch over Marjory? Swear, man, swear by all that's sacred that you'll do my bidding.'

'I solemnly swear that if ye come to ony scaith, I'll send the man that did it to Muckle Hell; and I'll see that nae ill comes ower Mistress Marjory. Keep an easy mind, laird;

I'll be as guid as my word.'

Without more ado I opened the window and looked out. My servant's talk of taking to the hills seemed an over-soon recourse to desperate remedies. Could I but remove my sweetheart from the clutches of my rival, I trusted to prove my innocence and clear myself in the sight of all. So my thoughts were less despairing than Nicol's, and I embarked on my enterprise with good heart. I saw the ground like a pit of darkness lie stark beneath me. Very carefully I dropped, and, falling on my feet on the cobblestones, made such a clangour beneath the very taproom window that I thought the soldiers would have been out to grip me. As it was, I heard men rise and come to the window; and, crouching far into the lee of the sill, I heard them talk with one another. 'Tut, tut, Jock,' I heard one say, 'it is naething but a drucken cadger come to seek his horse. Let be, and sit down again.' When all was quiet I stole softly over to the other side, that I might scale the wall and reach the wynd, for I dare not pass through the open close into the Harbour Walk lest I should be spied and questioned by the soldiers who were ever lonnging about.

But some fortunate impulse led me to open the stable door. A feebly-burning lantern hung on a peg, and there came from the stalls the noise of horses champing corn. They were the raw-boned hacks of the soldiers, sorry beasts, for the increase of the military in the land had led to a dearth of horses. But there was one noble animal at the right, slim of leg and deep of chest, with a head as shapely as a maiden's. I rushed hotly forward, for at the first glance I had known it for my own horse Maisie, the best in all Tweeddale. A fine anger took me again to think that my cousin had taken my steed for his own mount. I had sent it back to Barns, and, forsooth, he must have taken it thence in spite of

the vigilant Tam Todd. But I was also glad, for I knew that once I had Maisie forth of the yard, and were on her back and she on the highway, no animal ever foaled could overtake her. So I gave up all my designs on the wall, and fell to thinking how best I could get into the Harbour Walk.

There was but one way, and it was only a chance. But for me it was neck or nothing, my love or a tow in the Grassmarket; so I tossed my plumed hat and my embroidered coat to a heap of hay, tore open my shirt at the neck, put a piece of straw between my lips, and soon was a very tolerable presentment of an ostler or farrier of some kind. So, taking Maisie's bridle-and at my touch she thrilled so that I saw she had not forgotten me-I led her boldly across the court, straddling in my walk to counterfeit some fellow whose work was with horses. My heart beat wildly as I went below the archway and confronted the knots of soldiers, who, sitting on a low bench or leaning against the wall, were engaged in loud talk and wrangling.

'Ho, you, fellow, where are you going with the captain's horse?' cried one. I knew by his tone that the man was a Southron, so I had little fear

of detection.

'I'm gaun to tak' it to the smiddy,' said I in my broadest speech. 'The captain sent down word to my maister, Robin Rattle in the Flesh Wynd, that the beast was to be ta'en down and shod new, for he was gaun far the neist day. So I cam' up to bring it.'

The man looked satisfied, but a question sug-

gested itself to him.

'How knew you the one if you were never here before?'

'It was the best beast i' the place,' I said simply; and this so put his mind at rest that, with a gratuitous curse, he turned round, and I was suffered to go on unmolested.

Down the Harbour Walk I led him, for I dared not mount lest some stray trooper recognised the horse and sought to interrogate me. Very quietly and circumspectly I went, imitating a stableman by my walk and carriage as I best knew how, till in ten minutes I came to the end, and turned into Leith Walk and the borders of Edinburgh.

LIVING PHOTOGRAPHS.

By T. C. HEPWORTH.



a former article the illusion known by the above title was described as one of the newest and most attractive applications of the optical (or magic) lantern; and, in the same way that we endeavoured to trace

the genesis and evolution of the latter instrument, we will now endeavour to watch the gradual

growth of this most fascinating phase of photographic art.

As in the case of the optical lantern, the Cinematograph originally came from toy-land, and in its most simple form consisted of a card which could be rapidly twirled between the fingers by means of attached threads. On one side of the card was printed a horse and on the other side

a man, and the two images by this rapid twirling were made to coalesce and appear as a mounted horseman. It is quite evident that if by such simple means we could bring before the eye a succession of cards bearing progressive pictures, a very good idea of movement could be represented. Indeed, the thing has been lately accomplished in little books of pictures sold in the streets, the bent leaves of which can be rapidly released by the finger. And it may be mentioned here that an American contrivance, called the Mutascope, is to be presently introduced, which works on the same principle—the cards, bearing pictures of much larger size, being brought in rapid succession before the eyes by means of mechanism set in motion by a penny-in-the-slot device.

The Zoetrope is another of the old, but more elaborate, instruments for bringing progressive designs before the eye, and so cheating it into the belief that a moving figure is before it; and at one time various other toys on the same principle were submitted to public approval.

More than forty years ago a successful attempt was made to project such images on the lantern-screen, and there must be many persons now living who saw such things done at the old Polytechnic Institution in Regent Street, London. The apparatus was rough compared to that now employed, and the designs were hand-painted on glass, for what is now known as 'instantaneous photography' was not dreamt of in those days. These designs were generally not more than twelve in number, and they described a simple movement, such as a man trying to catch a butterfly with a net-the same cycle of movements being repeated over and over again. It is curious to note that the first instrument of this kind was invented by a blind man. M. Plateau. An improved apparatus was afterwards introduced by Mr Beale, of Greenwich, but he too had to rely upon rough designs painted on glass or cut out, stencil fashion, from thin metal.

The next step forward was by Mr Muybridge, a Californian photographer, who directed his attention to the portraiture of animals in motion, not with any intention of making the pictures into what we now know as 'living photographs,' but with the higher aim of analysing muscular movement in a scientific spirit. He used a battery of cameras, and, by means of a string stretched from each instrument across a kind of racing track, an animal, such as a horse, in running along that path, would break each thread in succession, and cause himself to be photographed in a fraction of a second in the particular attitude which he happened to assume at the moment. Mr Muybridge photographed various animals in this way, and published the pictures in a large volume. He afterwards lectured over here, and carried with him an instrument of the form already described for throwing the progressive images of his photographed animals on a screen. Anschütz in Germany later on worked on the same lines, and produced

various excellent studies showing the phases of an animal's gallop, of a bird's flight, &c. But all these clever attempts to combine a number of images on the lantern-screen were hampered by the necessity of employing glass as a support for the pictures. No other material then known had the transparency and whiteness required.

The sudden bound from these instruments, which were little better than toys, to the perfect machines now employed for showing the so-called 'living photographs,' is undoubtedly due to the introduction of a new material for the support of the photographic picture. It is obvious that with such a rigid, and at the same time brittle, substance as glass little could be done in this way; but directly the glass was replaced by a ribbon of flexible, transparent celluloid, half the difficulties at once vanished. The new material offered a ready means of securing consecutive negatives, in a specially-constructed camera, of scenes full of movement, and also of providing a strip of corresponding positive images for exhibition as living photographs.

The two instruments—the camera and the projecting lantern-are indeed so much alike that a description of one will almost serve for the other. But note that the first takes in the daylight, which acts upon a rapidly-moving celluloid ribbon; and that the last transmits the artificial lightpreferably that from the electric arc-which forms one of its necessary features.

The camera is furnished with two reels or spools, one of which is charged with, say, fifty feet of celluloid ribbon coated with a photographic emulsion sensitive to light. The other reel receives the ribbon after it has been exposed to the action of the lens. This lens forms a picture of the scene in front of the camera not much larger than a postage-stamp, on that portion of the ribbon which happens for the time to be in its focal plane. By turning a handle the operator causes the film to travel between the two reels, and by suitable mechanism to stop fifteen times in each second, a dark screen shutting off the light between each such exposure. The result is a series of pictures one above the other on a continuous ribbon of celluloid, the number being proportionate to its length. Each picture is a trifle different from the one which precedes and follows it; for instance, a moving train will show a gradual advance in each one of the series. In this way the negative image is produced, and from such a negative a series of positive pictures is obtained for use in the projecting apparatus or lantern.

In this latter instrument precisely the same means are adopted for projecting upon a screen or sheet the pictures in the same order in which they were taken, and those quickly following so merge into one another that the impression of an actually moving scene is reproduced with astonishing fidelity.

plished.

All instruments of this kind depend upon a peculiar property of the human eye known as 'persistence of vision,' by which the image of an object perceived remains impressed upon the retina for about the tenth-part of a second. It is possible to refer to a number of illustrations which will make this readily understood, but a few will suffice. We, most of us, unconsciously wink our eyes several times in each minute, and were it not for the image of things looked at 'persisting' on the retina we should each time have the disagreeable sensation of darkness, which we certainly have not. Again, the boy who twirls a stick with a glowing end round and round makes, in the dark, circles of fire-at least so they appear to be, although we well know that there is only one point of light. When we are travelling by rail and a train rapidly passes ours in the opposite direction we can see the landscape through its windows without any apparent break. By the same law, pictures passed before the eye with sufficient frequency, and occupying the same position, will merge one into the other, and give us the impression of a single, unbroken design.

The first instrument which employed the celluloid ribbon as a support for the pictures was Edison's Kinetoscope, which took the form of a cabinet into which the spectator looked through two eyeboles in the top. By very elever mechanism, actuated by an electric motor, the various pictures were brought into view in rapid succession, and the idea of movement was faithfully attained. But this instrument had but a brief popularity, possibly because only one person could see it at one time: it was merely a question of mechanics to apply the same principle to the projecting lantern, and this was speedily accom-

The expense and trouble involved in taking a series of negatives for one of these animated photographs is considerable, although the actual operation occupies little more than a minute of time. The cost of the sensitised ribbon of celluloid is about 30s., a similar ribbon for the corresponding positive bringing up this item to £3. After exposure in the camera, the ribbon, or film, as it is called, must be developed, and to develop a strip of material many yards long is no light undertaking. It is in fact wound upon a drum, and the drum is rotated in a bath of the developing fluid until the pictures make their appearance; after which it is fixed, washed, and dried before being removed from its support. Then from this negative the positive has to be carefully printed by the action of light on a similar ribbon, and this new film too must be developed, washed, and dried; operations in which the risk of failure creeps in at every point. The enterprise could never be made to pay were it not for the circumstance that a single negative film will yield any number of positives, and that

there is a great demand for productions of the kind.

But even in the initial stage of the work, the taking of the pictures in a camera, accidents will happen. For example, the operator may be photographing some notable scene, such as the Lord Mayor's Show. He has chosen the most interesting part of the procession for his pictures, and sets the apparatus going, when an individual suddenly interposes his broad back, all unconscious of the harm he is doing, in front of the instrument, with the result that the expensive film is wasted upon a series of uninteresting and valueless studies of a man's head and shoulders.

There are many different forms of apparatus for exhibiting these animated photographs—all working on much the same lines, and differing only in details of mechanism. They mostly are adapted for pictures of the size already mentioned, little larger than a postage-stamp. The American Biograph stands alone in utilising pictures covering about nine square inches, and a French inventor has adopted an intermediate size.

By common consent the American instrument is judged to be the finest yet produced, and its superiority is principally due to the circumstance that its pictures are so large in area. This is easily understood when it is remembered that the whole of the light which projects the picture from the lantern to the screen must go through the picture—and a large one will necessarily pass a great deal more light than a small one will. In the result the pictures can be shown on a very large scale, and become most life-like in their effect; but the increase in the area of the film, which is roughly from one to nine, of course makes a proportional increase in the cost of producing the pictures.

A most ludicrous effect is produced upon the screen by reversing the natural order in which the pictures are passed through the projecting apparatus. Thus, the picture may represent a plunge bath, and we see one swimmer after another take a header from a high spring-board and note the splash and tumult in the water as each man dives below its surface. Now, when this picture is passed through the lantern in the reverse order, a most comical state of things comes about. First the still water, next a splash, and then a diver emerges feet first from that splash, and, in a graceful backward curve through the air, alights upon the diving-board-retiring backwards to make room for some one else who goes through the same inane performance.

It is only fitting that the art of photography, which found its birth about the year 1837, when our Empress-Queen was crowned, should be exhibited in its latest triumphant phase sixty years later on the occasion of the diamond jubilee of Her Most Gracious Majesty. On the day of that great public procession a large number of the newly-contrived cameras were at work, and

some miles of celluloid film were passed through those instruments. Many successful pictures were obtained, and have been shown all over the country in the form of living photographs. These will be a precious legacy to posterity. Would that we had the opportunity of viewing in the same way some of those events of the past which go to make up our national history!

THE HUSBAND OF MILLICENT.

CHAPTER II.



HE next day she felt a little more cheerful. The weather was bright and sunny, and, as she had an excellent digestion, her spirits rose in spite of herself.

After some consideration she decided she would go and lunch with an aunt who lived about five miles distant, and at whose house she had been staying when she first met her husband—it would distract her thoughts.

Of course she would not let a word of what was troubling her pass her lips; it would be most undignited. Still, there was the consolation of knowing that unbounded sympathy might be hers if she chose to requisition it; for she knew that her aunt always sided with her own sex at heart, whatever she might feel it her duty to verbally affirm.

About half-past twelve the phaeton and cob came round, and she drove off down the chestnut drive, up the Church Hill, and along the winding village street. But Millicent did not heed the parish to-day. She was lost in thought. She neither remembered to nod to old Jenkins, who stood blinking in the sun at the corner of the blacksmith's shop, nor to stop and inquire after Mrs Ingram's ninth baby, which was suffering from some infantile disorder.

She hardly noticed the beautiful russets and reds of the late autumn, massed in lavish colour on either side of the country lanes through which she passed. She drove mechanically, avoiding the ruts and the patches of newly-laid stones more by instinct than by observation.

Her uncle greeted her at the hall-door as she arrived. 'Delighted to see you, my dear; you are just in time for luncheon. The gong has sounded, but we have not begun. Your aunt will be so pleased to see you.'

He helped her to divest herself of her driving coat, and they crossed the hall and went into the dining-room together.

Mrs Jermingham was seated at her place at the table. She jumped up to welcome her favourite niece.

'Oh Millicent!' she cried as she kissed her warmly upon each cheek, 'I am so glad you have come. How are you, dear? Come here and sit by me. Cold chicken and tongue? You will like that salad. Your uncle made the sauce. It takes seven minutes to drop the oil; he is so very particular. Is Henry still away? It seems a long

time. Oh yes, I know; of course he must look after his father. The only child left. Poor old man. He won't recover, I should say, at his age. Oh yes, George, I know what you are going to remark; but you have always considered your liver, and are so abstentious. Few men are like you. I hear the property is very much let down, and—

'Will you be so good as to pass the potatoes, Sophia?' interrupted her husband, who for upwards of forty years had acted as conversation-quencher to his wife without entire success.

'I always said Henry was an excellent son,' continued Mrs Jermingham in an unperturbed voice. She always made a point of praising husbands before newly-married wives. 'They say his devotion to his mother upon her deathbed was quite a thing to see,'

'Yes, I dare say,' said Millicent absently, as she helped herself to some salt.

'And a good son makes a good husband,' added her aunt, with a smile in her niece's direction.

'Except when he doesn't,' observed Mr Jermingham jocosely, as he munched his celery.

'Your uncle is only joking, dear; he knows quite well that what I say is true. He was a good son himself.'

'And is a model of husbandly virtue now,' interrupted that gentleman blandly.

'Well, as aunt always gives in to you, it's easy enough,' cried Millicent, a touch of asperity in her voice. She disapproved of her uncle as a husband, and rather prided herself upon her courage in letting him know it.

'Of course, my dear,' interrupted her aunt hastily. 'It's one's duty. I always agree with your uncle as my duty—a wife's duty. And I also prefer it.'

Millicent looked at her aunt with commiseration in her eyes. It was bad enough to call it duty—but to hug her chain!—to pretend to herself she liked it! It was really very sad.

'Oh yes, I know you women—you're very deep; you give in so meekly, and get your own way all the same. I know you!' Mr Jermingham leaned back in his chair and laughed, with the air of a man who knows he is master, but enjoys playing with the opposite idea.

'I don't give in,' said Millicent stolidly. 'I should think it quite wrong to do so. Women don't nowadays. They expect to be treated on equal terms.'

Mrs Jermingham looked a little nervously at ther niece. She wished she would not take up these strange upsetting ideas. And then, too, to snatch away her crown of glory—her forty years of self-repression—was not kind,

'How is the parish getting on, dear?' she asked, a little timidly. She felt it was rather a sudden break upon the conversation; but she wanted to

return to more comfortable ground.

'Oh, pretty well. We have a man to help with the Sunday duty, and I do what I can in visiting

the people, and that sort of thing.'

'I am sure you make a most excellent substitute, my dear,' said her uncle, as he replenished her glass with claret. 'That hat is most becoming. I have always held that a clergyman's wife should have an attractive exterior—it paves the way so pleasantly.'

'My dear George, I am sure you don't mean what you say. You know quite well that people sught to dress quietly when they visit the poor, and set a good example. Especially a clergyman's

wife.

Millicent had not an over-abundant sense of humour, but she felt her aunt was a trifle matter-of-fact. She smiled good-humouredly at her uncle, and turned the conversation by inquiring about the garden. 'You must show me round after lunch, aunt,' she said. 'I want to know all

about autumn plants.'

Mrs Jermingham's eyes brightened. She was a born gardener, and needed little encouragement to launch forth upon the subject of bulbs and cuttings and hot-house management, and other horticultural information. But though Millicent's face smiled attentively as they walked up and down the old-fashioned garden-walks afterwards, her thoughts were not there. They had flown back to her troubles; and when at last, laden with spoil in the shape of plants and flowers, they returned to the house together, she made up her mind what she would do. She must confide in somebody—some one who would sympathise, who would be sure to take her part.

She would confide in her aunt. Mrs Jerming-ham might not be the best person in the world to go to for advice, but she was sure to be sympathetic. That was the important point. It would no doubt be more dignified to bear her trouble alone; but dignity is poor consolation in distress. She would sacrifice it this once.

'Come upstairs, dear; I have something to show you,' said her aunt, as she deposited the basket of flowers upon the hall-table, and began to take off her garden gloves. 'It's a new mantle,' she whispered as they walked up the broad oak staircase together; 'don't say anything about it to your uncle. He thinks that women over a certain age don't want new clothes. But really, dear, the white and blue horsecloths he got the other day cost ever so much more.'

They passed down a long, dimly-lighted pass-

age, at the end of which was Mrs Jermingham's room.

'Aunt,' said Millicent as they entered, 'don't get out the mantle yet; I have something to tell you, something that's bothering me dreadfully. Sit down here and I'll tell you what it is.'

Mrs Jermingham turned round, in the midst of unlocking the wardrobe, with a mixed expression of anxious inquiry and pleasurable anticipation

upon her face.

'Yes, dear; what is it?' she said eagerly, as she settled herself on the low sofa by her niece's side.

Millicent gave a minute account of the whole affair. She described her injured feelings so graphically that she was quite moved for herself afresh. Her eyes were almost tearful as she came to a pause at the end.

'What can it be? What would you do?' she said as she looked questioningly at her aunt.

Mrs Jermingham had listened with breathless attention. 'Poor darling! it is most extraordinary. I do feel for you,' she cried.

'I knew you'd take my part, that's why I told you,' said Millicent, in a slightly-gratified voice.

'Yes, but—you know, dear, it may not be anything very bad; and there are so many things about men we can't understand that—that'—

'Oh yes, I know all that. Of course, if Henry were a different sort of man I should say it had to do with a woman. All men's secrets have to do with women as a rule.' Millicent folded her arms and looked at her aunt with an air of exhaustive worldly wisdom.

'My dear, what dreadful things you say. Young women know so much more nowadays than when I was young. It takes one's breath away. I am sure it is something harmless—perfectly harmless—knowing Henry as I do. And no doubt he will tell you by-and-by.'

'He has no business to have secrets from me, humless or not—secrets which a servant knows! that's the annoying part. I don't care if it is harmless, I ought to know.' She leaned back in the sofa, and stared angrily in front of her.

'One can't expect to know everything about a man,' said Mrs Jermingham in a qualifying tone. 'One would hardly wish to.'

'One expects to when one marries him,' answered her niece with some asperity—'at any rate I do.'

Mrs Jermingham looked pained. She was just about to remonstrate with this heterodox view when an idea seized her.

'Millicent,' she said impressively, 'I believe I know. I think I can guess what it is. It is something harmless—at least it is not exactly harmless—I should think it very wrong—but'—

'Yes—what is it?' interrupted Millicent eagerly.

'Well, you know, dear, my views, and how pained I have been at the surpliced choir and flowers, and calling it the altar, and that sort of thing?'

'Yes-well?'

'Several things have made me feel lately that Henry has tendencies towards—towards'— Mrs Jermingham paused, and looked impressively at her niece.

'Towards what? Oh aunt, how mysterious you are!'

'Towards Rome!'

'Towards Rome! What do you mean?' cried Millicent, as she stared wonderingly at her aunt.

'Of course he would not like it to get about—the bishop being evangelical too.'

'But what on earth has that to do with the room?' interrupted her niece impatiently.

'I think, dear, it might be—it very likely is—a—private oratory.' She whispered the last words and looked nervously around as if she feared she might be overheard.

'Oh, is that all?' said Millicent indifferently. 'I'm sure I don't care if it is; only I won't have

anything kept from me.'

Mrs Jermingham looked disappointed. She was accustomed, however, to have her suggestions somewhat slighted, and her voice was quite goodhumoured as she answered: 'I wish you were more decided in your views, dear. I think it would be very dreadful if it were true—but still, I admit it might be worse, and'—

'I don't think it's that at all,' interrupted Millicent moodily. 'It is the curate who is High. Henry lets him go his own way. I think myself

Henry is Broad.'

She frowned down upon the floor, and considered things for a few moments.

'I know what I shall do,' she said presently. 'I shall go and stay away with a friend, just to show what I think; that's what I shall do.'

'My dear, I don't think you had better do that. Henry will expect to find you here when he returns. Wait a little and see what happens. That is my advice.'

'Well, let him expect. It will do him good to be disappointed for once.' 'If she had disappointed uncle sometimes he would not be such a tyrant now,' she added to herself as encouragement. The idea worked in her mind as they returned to the drawing-room for tea, and fluttered before her as she said good-bye.

By the time she reached home it had so enlarged itself that she had quite made up her mind what to do. She would go up to town. She would go and stay with Jessie Waldegrave, her particular friend. Jessie lived with her sister in Kensington Square, and studied at the Slade Schools. They would both be delighted to see her. She knew that. It could easily be arranged. She would leave a note for Henry saying—she was not quite sure what. But that she could decide later on. It would be two days before she received Jessie's reply, and then she could make up her mind. Something dignified—that would touch his conscience—that would arouse his self-reproach.

Meanwhile she would get everything ready.

A ROUMANIAN BRINDISI.

By D. T. TIMINS, B.A.



a map of Europe were opened before the ordinary magazine reader and he were offered a large reward for pointing out Küstendje without a moment's hesitation, most probably the reward would not change hands.

Possibly some few travellers, whose wanderings in eastern Europe had led them into the wilds of Roumania, and a few geographers, whose profession obliges them to keep the whereabouts of the most out-of-the-way spots at their fingers' ends, would fulfil the required conditions. The ordinary man would gaze helplessly at Norway, Russia, or elsewhere for inspiration; and he would have every excuse for his ignorance.

Küstendje is the Turkish spelling of the name of the Roumanian port on the Black Sea which (since 1878) the Roumanians spell Constanza and Constantza—a town of eight thousand inhabitants, believed to stand on the site of the Roman Constantiana. Roumania boasts of but few ports, as she has a very limited seaboard; nevertheless, those which she does possess enjoy a very large export trade, principally in grain. The customs

tariff is too high to admit of a correspondingly large import traffic.

It may well be asked what possible interest this comparatively obscure place can possess for English readers. The answer is, that if the efforts of the Roumanian government are crowned with success, Englishmen will have a very vital concern indeed in the fate of Küstendje, for there is no less a project on foot than the ousting of Brindisi from its pride of place as first recipient of the homecoming Indian, Australian, and Oriental mails, and the substitution in its stead of this hitherto littleknown scaport. The idea at first sight appears almost preposterous, but there are few people who know the enormous amount of money that has already been spent in endeavouring to further this ambitious scheme, or the extent of the negotiations which the Roumanian government have set on foot for the carrying out of their plans.

It has been an open secret for a long time past that Brindisi fails to give satisfaction as the selected European port of call for the P. & O. liners on their outward and homeward voyages.

The great inconvenience and delay which

travellers experience who embark or disembark at Brindisi, are perhaps more potent considerations in favour of a change being made than is the question of the expediting of the mails, for the latter are conveyed across Europe with fairly reasonable rapidity. The journey from Calais to Brindisi is known to be the most uncomfortable on the Continent, and the Italian railway companies, by their stubbornness at one time and their supineness at another, are mainly responsible for this state of things. The feud which existed between the Italian companies and the other European railway companies concerned in the carriage of the through mails to the East, down to a very recent date, caused all ocean-going travellers to avoid Brindisi as far as possible; and it was then that Marseilles came into favour, and its popularity is, moreover, steadily increasing.

While all this was going on, it occurred to an exceedingly astute Roumanian minister that it might be possible to devise a route for the Indian mail-train which should pass through Roumania and still be able to compete in point of time with the existing service vid Brindisi. It was not to be supposed that the P. & O. liners could be induced to steam up the Black Sea as far as the Roumanian coast, and therefore it became necessary to hit on some other expedient. Constantinople naturally suggested itself as being the most likely and suitable place for the purpose, but the government had no idea of letting Turkey reap more benefit than they could help from extraneous enterprise, and the same remark applied to Bulgaria. It thus became increasingly evident that, if the project were to be profitable to Roumania, that country must have entire control over all sections of the proposed through route, and also that such through route must inevitably terminate at Küstendje. For a railway already ran in an almost straight line from Bucharest to the banks of the Danube opposite Tchernavoda, and then continued on again from Tchernavoda to Küstendje. The first thing to do was evidently to construct a bridge over the Danube at the former place, and so do away with the necessity for ferrying over this river from the one station to the other. This bridge was built at an enormous cost, and formally opened in June 1892, at which time the first through trains ran between Bucharest and Küstendje.

The link to Constantinople was completed by means of two twenty-one knot passenger-steamers chartered for the purpose. Roumania cannot be characterised as exactly a maritime power, seeing that she possesses a navy consisting of but four ships, and it was therefore not surprising that she could not furnish suitable steamers from her own mercantile marine. It was very necessary that the steamers should be exceedingly speedy, inasmuch as they were practically competing with the Orient Express train, which was already running overland to Constantinople, though, fortunately for Rou-

mania, its timing was—and still is—very slow during its transit through Turkey and Bulgaria.

The entire chain of communication was now complete, and it only remained to accelerate the journey to an extent which should attract travellers and bring the whole scheme before the English public. Negotiations were accordingly opened with the International Sleeping Car Company, which resulted in an arrangement being come to whereby, in consideration of the payment of a large subsidy, the Orient Express should run direct from Vienna to Küstendje on one day of the week and connect there with one of the new fast steamers to Constantinople. Not content with this, the government shortly afterwards, by promise of a further subsidy, induced the Sleeping Car Company to do the same with the newly-established Ostend-Vienna Express.

Here then was a real result from the labours of the government. Two of the most important and comfortable express trains in Europe now ran to Küstendje, giving through communication between that place and Paris, Vienna, Munich, Brussels, Cologne, Frankfort, &c.—in short, all the most important towns on the Continent; while they in their turn were afforded a new and more frequent service to Constantinople. So far so good.

Everything was now ready for the conveyance of the prospective traveller from London to Constantinople vid Küstendje, and it only remained for him to show his appreciation of this, the most recent addition to the travelling facilities of Europe, by patronising it in his thousands.

Unfortunately for the realisation of the rosecoloured dreams of the Roumanian government, the passenger booking-office gave a new illustration of that oft-quoted process known as 'summoning spirits from the vasty deep,' and Küstendje station echoes but to the fitful footfalls of the bookingclerk, while the splendid train of sleeping-cars stands by in mournful desolation until bidden by the omnipotent 'toot-toot' of the guard's horn to speed on its way-empty! It is a melancholy fact that there are scarcely any travellers by these trains, and that they frequently run empty, or with at most but one passenger, as far as Bucharest. Whether it be that the inhospitable billows of the Black Sea shake their crests too forbiddingly at the would-be traveller, or whether it be that the number of persons in search of the beauties and joys of the 'Golden Horn' or the Turkish cigarette is not sufficiently numerous to overflow from the existing direct route of the Orient Express via Belgrade into the supplementary steamer route vià Küstendje, time alone can show. Suffice it for the present that the Roumanian government have already lost £60,000 over the experiment, according to the latest published returns, and it can only be in the event of their scheme ultimately finding favour in the eyes both of the English government and of the P. & O. Company that they can hope to recoup themselves for their enormous initial

outlay and the subsequent unexpected loss which it has entailed. It speaks volumes for the desire of the government to benefit the country that they should be willing to risk so large a sum of money and to continue to bear so heavy a burden in the interests of this slightly chimerical undertaking.

Let us see how the route actually compares at the present time with that vià Brindisi, and what saving could be effected by a subsequent reasonable acceleration, if the necessity arose for making one, and if a sufficient inducement were offered so to do. The boat train which conveys passengers for the Eastern mail steamers vià Calais and Brindisi leaves Victoria and Charing Cross at 9.0 p.m. on Friday night, and reaches Brindisi at 5.35 p.m. on the Sunday night following. The timing of this train, which is known as the Peninsular Express, is as follows:

London depart 9.0 P.M. Friday.
Calais depart 1.0 A.M. Saturday.
Brindisi arrive 5.35 P.M. Sunday.
Time—44 hours 35 minutes.

The portion of the journey which concerns us is that from Calais to Brindisi, as the connecting service from London to Calais would still remain the same whether the train were proceeding to Brindisi or to Küstendje. The run from Calais to Brindisi, then, occupies 40 hours 35 minutes.

The present through time-table to Constantinople vid Küstendje is as follows:

ORIENT EXPRESS.

	Londondepart 11.0 A.M.	
	Calaisarrive 2.20 P.M.	
	"depart 2,50 "	
Change	Rheimsarrive 8.16 n	Thursday.
	"depart 8.32 "	
Change	Châlonsarrive 9.20 "	
	"depart 9,26 "	
	Viennaarrive 6.52 "	
	"depart 7.36 "	Friday.
	Küstendjearrive 11.50 "	Saturday.
Steamer.	depart 12.30 д.м.)
	Constantinople. arrive 3.30 P.M.	Sunday.
	Wine from Landon 76 horns 20 min	

Time from London-76 hours 30 minutes. Time from Calais-72 hours 40 minutes.

OSTEND-KÜSTENDJE EXPRESS.

London	depart	10.0	A.M.	
Ostend				
	depart	4.21	n j	
Vienna	arrive	4.30	11	١
1t	depart	5.34	li j	Wednesda
Küstendje	arrive	9.35	11	Thursday.
Steamer "	depart	10.0	111	Inursaay.

Constantinople. arrive 11.0 A.M. Friday.

Time from London-73 hours.
Time from Ostend-67 hours 20 minutes.

Thus the Brindisi train holds an advantage of 26 hours 40 minutes over the Ostend-Küstendje Express and of 32 hours 5 minutes over the Orient Express. But against this must be set off the time occupied by the P. & O. boat in steaming from Port Saïd to Brindisi as compared with that

which a connecting steamer would take in voyaging from Port Saïd to Constantinople. The point at which the two different routes would once more converge is the entrance to the Straits of Messina, and therefore this place has been selected as one of the terminal points for certain measurements, as will be seen in the subjoined table:

Port Saïd to Brindisi	.1140 miles.
Port Said to Constantinople	. 920 "
Difference in favour of Constantinople	. 220 u
Straits of Messina to Brindisi	. 335 "
Straits of Messina to Constantinople	. 930 "
Total distance Port Said to Straits of	
Messina vid Brindisi	.1475 "
Total distance Port Saïd to Straits of	
Messina via Constantinople	.1850 11

Therefore assuming that a P. & O. boat steams (as they normally do) at the rate of about 350 miles per day, the mails will be landed at Constantinople fifteen hours before they could be put ashore at Brindisi. The steamers between Constantinople and Küstendje at present perform the journey in thirteen hours, but this is very considerably below their contract speed, and if there were the slightest reason for them to make a quick passage they could easily shorten the time to ten hours. One of them, the Carolus I., has already got well inside even this time. Therefore, allowing thirty minutes for the transhipment of the mails at Constantinople, Küstendje is reached with a clear advantage of 4 hours 30 minutes over Brindisi. Moreover, if the run from Port Said to Constantinople were performed, as it most probably would be, by separate steamers connecting at Port Said with the P. & O. liners, there would be no need to tranship the mails at Constantinople, for the connecting boats could proceed direct to Küstendje, thereby effecting a further saving in time to the extent of at least half an hour. And now for the land journey.

Taking the times at present given in the official time-tables, and assuming the Ostend-Küstendje Express to run from Küstendje to Calais vid Cologne, instead of to Ostend, and to be timed from Cologne to Calais to run at the same speed as does the Nord Express from Berlin, we get:

Küstendje to Cologne	
Total.	
Plus sea journey from Constanti- nople	
Total	
Deduct from this, time gained or voyage from Port Said	

49 hours 20 minutes.

This result apparently gives pride of place to the Brindisi route; but the relative speed of the two trains must be looked into. They are neither of them by any means fliers.

	PENINSULAR EXPRESS.	
Miles.		Speed.
	Calaisdepart 1.0 A.M. Saturday. Brindisiarriye 5.35 P.M. Sunday.	35 miles per
1400	Brindisi arrive 5.35 P.M. Sunday.	hour.

PROPOSED CALAIS-KÜSTENDJE EXPRESS.

(According to present timing of Nord Express and
Ostend-Vienna Express.)

 $\begin{array}{c} \text{Miles.} & \text{Speed.} \\ 1535 \left\{ \begin{array}{c} \text{Calais.......depart 2.37 r.m. Tuesday.} \\ \text{K\"{ustendje...,arrive 9.45 n} \end{array} \right. \end{array} \right\} \begin{array}{c} \text{Speed.} \\ \text{Per hour.} \end{array}$

But are we to suppose that travellers will rest content with these speeds?

Does not every month bring about some new acceleration of train services, and can we believe that so important an express as this one would be, could for long travel at so mean a speed? Such a thing is not to be thought of for one moment. In 1896 the Orient Express was accelerated as between Vienna and Küstendje by two hours, and its time could just as easily be shortened by a further two hours without even then running the train with any undue haste! The rich Indian mail-train subsidy is a prize well worth making a big effort to gain; and seeing that the Orient Express is owned by the English Post-office, they could kill two birds with one stone and effect a big saving to themselves by running it as the Indian Mail on one day of the week. Moreover, instead of having to deal with the lazy and obstructive private Italian railway companies, whose policy would justify any one in supposing that they were bent on killing the golden goose-that is, the Brindisi steamship traffic - the Post-office authorities would enjoy the hearty co-operation of an energetic government, whose whole action is one of vigorous reform and improvement, and who would meet them half-way in any scheme which would be of benefit to Roumania.

Here then is the time-table of the future Indian mail-train via Küstendje, assuming it to run at the very moderate journey speed of forty miles an hour (no trains in England which run at a lower speed being characterised as 'express'):

- 1	liles,			NEW .	INDIAN	MAIL-TRA	IN.		
	LIII.	Ca	lais		.depart		.2.40	P.M.	Friday.
1	535								
S					depart	(steamer)			11
8	210	Clo	nstant	inonle	arrive		3.30	PAT	

Time to Küstendje—38 hours 22 minutes. Speed, 40 miles an hour.

Through time, Calais to Constantinople......48 hr. 50 min.
Brindisi.............40 hr. 35 min.

But deduct gain on voyage from Port Saïd to Küstendje over that from Port Saïd

This does not at first sight appear a very large gain, but it must be borne in mind that these calculations are based on the routes followed by existing trains. A very much shorter route could be arranged between Calais and Vienna than that $vi\hat{a}$ Brussels, Cologne, and Frankfort without constructing a single mile of new railway. Moreover, a comparatively low rate of speed has been assumed for the whole journey.

But a gain of even seven hours is by no means inconsiderable where mail traffic is concerned, and this particular gain is capable of a large increase. If the lines east of Buda-Pesth were re-laid with heavier rails and doubled in a few places, there would be nothing to prevent the train from easily attaining a speed of sixty miles an hour over the flat plains of Roumania.

The whole project is no doubt very ambitious, but it possesses the three great elements indispensable to the success of any scheme—namely, feasibility, practicability, and superiority over existing conditions.

Now that the authorities at Brindisi are proposing to berth the P. & O. boats in a still less accessible and more unhealthy part of the harbour, there is all the greater reason for making a change; and if the Roumanian government are quick to seize the opportunity we may yet see the particular coloured house-flag floating at the Golden Horn. The speedy consummation of any scheme which will deliver them from the terrors and discomforts of Brindisi will no doubt be devoutly prayed for by all Indian travellers.

But for the present we must cry in Roumanian, Distout! (Enough!)

CORNERED.

By George G. Farquhar.



HE two shots rang out almost together; but that half-wink of time just made all the difference, for the Big Britisher's bullet got home somewhere in Cy Muskew's chest, while Cy's revolver simply

spat its lead into the air without so much as winging a fly. Cy himself drops there, flat and

limp, his face going bluey-gray, and a dark blotch spreading over the front of his woollen shirt.

Guess the Britisher didn't suspicion he had so heavy a finger on a trigger neither, or he wouldn't have stood there with his mouth open, staring at the body, for close on a minute before he stirred; yet, when he did move, he—well, he

just moved. Two dozen strides brought him to Jake Miller's shanty, where Jake's mare was hitched up, ready saddled—Jake having been over to the sawmill that very afternoon. Before you could have yelled 'Hail, Columbia!' the Britisher was up and pelting down the trail for all he was worth.

Of course I didn't know what the shindy had been about. I'd ridden over from Themis City with a message from dad for Uncle Ned, overseer of the lumbermen at the new camp, and the first thing I clapped my eyes on when I came near the cabins had been this smart pistol practice. 'Most all the men were still up in the ranges felling timber, and nobody 'cept me had seen anything of the affair. It was sprung on me so slick and unexpected, too, that I could do nary thing but gape and gurgle like a sick hen—me being then only a lanky lath of a galoot, rising fifteen, and never over and above cutewitted, I'm told.

Hows'ever, the noise of the shooting rousted the storekeeper out of a quiet snooze; then Jake Miller waddles out of his hut, holding the pannikin he'd just been swigging at after his dusty ride. The news soon got round, the 'boys' hurrying up till there was quite a tidy crowd hanging over the wounded logger.

'Poor Cy!' said one of them, solemn-like.
'I'm afeared he's nigh about dead-meat already.
I always did think he carried it too far with the Britisher. 'Course, it was on'y his bounce—he meant nothing by it; but Britishers is tetchy customers, some of 'em.'

'Anyways, this one's got the clean drop on Cy, an' that's a fact,' replied the storekeeper. 'I don't hold with chaffin' no man 'bout his nationality myself, being a thing he can't help, even if—— But clear away there! Here comes the Doc.'

Now the Doc. wasn't rightly a doctor at all; it was the name they'd christened him in the camp because he made out he'd learned a pokeful about ailments and physic while he was coachman to a real live medico somewhere way back in Illinois. My opinion, he knew no more about chemicals and such than my little finger.

'A serious case!' said he, stroking his chin and looking mighty wise. 'It's his right lung. No, a whole hospital of physicians couldn't pull him through this bout.'

'Is it so bad as that?' asked my uncle, who'd just happened along.

'Hopeless!' said the Doc. 'He's booked for Jordan's shore this trip, safe. I give him twenty minutes, not more—or, say, twenty-five!'

They toted Cy into his shack but, tender as if he was a china ornament, laying him in his bunk decent and comfortable—him moaning and gasping a bit between whiles, as Uncle Ned set to sponging and dressing the bullet-hole. You bet Uncle Ned wasn't going to take the Doc.'s

word for gospel any more'n me. He meant to try all he knew to pull Cy Maskew from under the very coffin-lid itself.

Outside, the boys were talking low and excited, looking black as thunder. I joined them to ferret out what they was confabbing over.

'We've got to lay out after him,' Steve Hicks was remarking like a judge. 'We've got to haul the Britisher back here to take his trial reg'lar. Not that I'm sayin' it's murder, mind you! No, I don't say that. But we've got to do the square an' legal towards poor Cy what's dyin' in there, for the sake of how it looks. That's legislation, ain't it, boys?'

'Wal, I dunno,' Tom Snell growled. 'Pears to me it was a fair fight enough. They'd both lugged out their shooting-irons, an' 'twas first bead that won. What's wrong in that?'

'Yes—yes,' shouted Jake Miller, who'd been stamping and raving round like mad. 'But nobody seems to care a red cent 'bout my mare. How'm I to stand over that loss, hey? Don't it strike you, mates, as the derned Britisher is worse'n a murderer?—he's a pesky horse-thief as well!'

This put things in a fresh light altogether, in a manner of speaking. The boys hadn't thought about that before, and soon they was all wild to saddle up and start. You see, one man may kill another—provided the fightin's done honourable—and small blame to him sometimes, maybe; but to be a sneaking, ornery, no-account thiever of cattle is—well, it's a risky trade out in Shona County. The more civilised a neighbourhood is, the riskier the business becomes; and Judson's Camp was always reckoned in the front rank for gilt-edged progress. You may gamble there's no specks on civilisation in that community.

Before long, half-a-dozen lumbermen rode out from the camp, meaning to hunt down the runaway even if so be it took all night and all next day to catch up with him. Steve Hicks, I noticed, carried a long coil of rope over his Mexican saddle.

'Say, Jack,' I inquired of the storekeeper, 'what's Steve doing with that lasso? Are they 'feared the Britisher'll break loose again if he isn't trussed up tight?'

The storekeeper winked.

'Don't 'spect they 'll worry to bring him along at all,' said he. 'Don't 'spect they will.'

Then I tumbled to the game. Judge Lynch was in that outfit!

The boys had not returned when I left the camp to trot back home next morning. I could have liked well to stop and hear what they had to say when they did show up; but Uncle Ned wouldn't listen to me,

'No, Pete,' he objected. 'Bein' as how there's nigh thirty miles in front of you, you'd best be travellin'. You'll have your father in a rampin'

tantrum if you don't get home right smart now. He's dead nails on onpunctuality, is brother Ephraim.'

I knew it. Many's the larruping dad's give me for being what he calls 'dawdly as a down-Easter;' and the old man owns to a plaguy heavy hand with a hickory switch. So I judged it best not to wait.

For half the distance I kept to the usual track at the bottom of the gulch, and then, seeing I could cut off a good three miles by bearing over a hump of the hills, I put my pony's nose to the ascent. At the top, halting to give the animal a breather, I thought I caught sight of something stirring among the spruce pines a hundred feet below me. I couldn't be certain; it came and went quick as a flash.

'Hullo, there-hullo!' I shouted.

Like as not I'd been mistaken; either 'twas my fancy only, or the sun slanting on a leaf, or maybe the gray scut of a skeered jack-rabbit. Anyways, not getting so much as an echo in reply, I started my mount down the farther dip, which hereabouts, besides being steep as a roof, is covered with loose shingly stones that make it nasty going. I dare say I was a trifle careless—perhaps figuring in my mind about the thing I'd seen flit among the trees, and letting the horse pick his way as best he pleased—when, of a sudden, his fore-feet slid out over a flat boulder, and 'snap!' went the rotten stirrup leather. Over I pitched, plumb onter the top of my head.

Reckon I must have swooned right away then, for I can sense nothing after, till I found myself raised with my back resting against somebody's knee and somebody's arm round my shoulder. A

whisky-flask was at my lips.

'That was an ugly spill, my lad,' said the owner of the knee, arm, and flask. 'How do you feel now? Better, eh? Ah, that's the ticket!'

I ogled up at the man out of the tail of my eye, It was the Big Britisher! While I lay studying what to say, he began bandaging my head with his handkerchief.

'Your cranium must be pretty tough, youngster,' he said presently, 'to have stood a tumble of that sort.'

Now there's not a white man kicking that's got a harder skull than me; but still I didn't see the Britisher had any call to mention it quite so chirpy.

'Anyhow,' says I, when my tongue came loose, 'sometimes a tough windpipe is better even than a tough head. Sometimes, I say, Britisher—'specially when there's a rope round it.'

You should have seen his jaw drop. My land, a buck nigger in full gape was a fool to him.

'What d'you mean—what d'you mean by that?' shouts he. 'Ha, now I recollect! You are the nipper who happened upon us when I— Maskew—— Boss Judson's nepliew, aren't you?' 'That's me—Pete Judson! I'm not 'shamed to own up to my name, no time.'

'No, of course—no,' agreed he, speaking sorter dreamy-like. 'Never disgraced it! Neither sorrows, heart-ache, nor remorse; no—— Pshaw, dash it all, what a confounded sniveller I'm getting! So they're out,' says he, gulping in his throat—'out after me! Is that it?'

I nodded. 'With a strip of raw-hide!' I added, nodding again.

The Britisher took to thinking hard, staring away at the high cliff on our right as if trying to look clean through the hillside.

'Well, they'll have their hands full, I fancy,' he muttered quietly. 'I'm willing to answer in a court of justice for what I've done, but I will never tamely submit to be handled and strung up by a gang of half-savage ruffians. If it comes to fighting I shall show fight in self-defence—now, as I did against Cy Maskew.'

'Pears to me you've jumped the chute, mister,' I started in to explain. 'Tain't for Cy you're to hang, but for stealing Jake Miller's mare. Last time I saw you, you was scuttling outer the camp fast as six legs could carry you. And Jake, he holds as four of 'em belonged to him by rights. Perhaps he's wrong—I'm not saying either way myself'—

'No,' says he—sharp, just like that—'No! By this time the horse is safe in the keeping of its owner again. You don't understand? Well, some hours after that—that—after I'd loaned the animal, when I came to think over my position, I saw how foolish I'd been not to face the trouble. At once I decided to turn the mare loose and let her find her way back home, while I proceeded on foot to surrender myself to the sheriff at Themis City. Yes, by now I'm sure Jake must be satisfied.—But, by Jove, look down there! See them?'

I squinted where his finger pointed—across to the clearing on the far side of the gully, rather under half-a-mile away in a bee-line. Straight enough, it was the Vigilance Executive, the whole tot of them—Steve riding at their head, with the rope slung over his saddle, Tom Snell, Dandy José, and Chip Ward; old Hagen brought up the rear, leading a spare mustang by the bridle. They'd spotted us, too, soon as we saw them.

'Hands up, Britisher!' roared Steve, spurring his horse to the climb. 'The game's played out! Hands up, ye dolgarned thief!'

After the way he'd been swaggering to me I expected to hear the tenderfoot answer this order with a cracking six-shooter; but he never made a sound. I looked back to see whether he was going to funk it or freeze to what he'd said. He wasn't there. He'd clean gone—lit out—vamoosed! Right then I saw 'twas all empty boasts—pure brag!

'Is it, though?' I sang out, a minute later.

'No, b' gosh, it ain't, neither! There's going to be fun after all!'

Just here the hillside went sheer up for fifty feet or more, like the bluff in a cañon, its base doubling back to the shape of a wide-mouthed V: at the corner so made, a low-topped hollow was scooped out of the cliff, scarcely seen from below because of the bushes overhanging it and the fallen rocks in front. Into this handy shelter the Britisher had scrambled. Now, only one of the boys at a time would be able to wriggle along the narrow ledge leading to this cave; and, as there was no kind of cover to hide behind while they were doing it, the Britisher would be in a position to riddle anybody who might attempt to hustle him out of his hole that way. And, so far as I sized it up, they couldn't tackle him any other.

Mighty quick the Vigilantes must have figured it out at that too; for they'd reined up just beyond pistol-range, gesturing and powwowing like they was pretty wroth about things.

'Reckon the Britisher comes out on top, up to now,' I said, grinning to myself. 'He's got his headpiece screwed on level, has the Britisher. Yes, he's real in-and-in grit all through, I'll go bail!'

After a spell, Steve began whistling and beckoning for me. I sluttered down the slope, limping to where they all stood ready to swarm round me like flies round molasses.

'Here, kid!' cried Steve, catching me by the arm, and jerking his left thumb over his shoulder. 'What's he say to it?'

'Who—the Britisher?' I asked carclessly. 'Lemme see now, what did he say? Oh!—"If they want me bad," says he, "tell 'em to fetch me, but"—says he, an' you should have seen his eyes then—"but," says he, "never alive! Never alive!" says he—an' I 'low he meant it.'

'H'm!' grunted Steve, middling upset. 'An' how's he served for weapons, now? Did you notice?'

'Two irons.'

'An' amm'nition?'

'His belt and pockets chockful of cartridges.'

That made them look bluer'n ever about the gills, and Chip Ward—who, I'd a notion, had grown white-livered all at once—he out with this:

'Wal, mates, we can't come at him from up above thar, nor so much as see his nose from down here. An' if we tried to rush him, why he'd simply plug the whole bilin' of us 'fore we got twenty yards, easy as winkin'. Ask me, he's just about got the fair bulge on us this time, boys.'

'Oh, I dessay—I dessay!' sneered Steve, tossing open his arms. 'That's the idea, is it? Ugh!'

'As you're so set on taking him, Steve,' I pops in, innocent as a Chinky; 'don't you think you might show 'em how, yourself? There'd be some sport in that, at any rate. An'

even if he did hole you, I dunno as Shona County would lose a deal of beauty, whether it'——

'None of your durn sass, young 'un!' yelled he, in a power of a temper. 'Keep your jaw civil an' respectful, or I'll tie it up for you. Blight me, if I don't!'

Most of the boys sniggered; but I turned away, hurt-like, to speak to Chip Ward.

'What's this picule want with the Britisher, anyway?' I inquired, 'Cau't say I know rightly.'

'But you was in the camp yesterday? Why, 'twas you saw him skedaddle with Jake's mare, wasn't it?'

I pointed slantways to where old Hagen stood with the spare mustang.

'Seems to me that ewe-neck looks wonderful like Jake's nag,' I muttered aloud. 'There's the gray star over her nose, the white stocking on the fore-leg, the rat-tail, an' ribs like a wagon-cover'—

'So 'tis-so 'tis; we know that, kid; we don't want no teachin'. That's where the Britisher thought to double on us with his artfulness. On'y it didn't wash-you see, it didn't wash! Like so, now! Last night, after follerin' in his tracks for close onter six hours, we saw he'd branched off as if he'd took into his head to make for the river 'stead of the hills; two hours more along this new route an' we came plumb on Jake's mare, with an empty saddle, an' no signs of the Britisher anywhere. But it didn't take us long to bottom that dodge, sonnie. Findin' it was gettin' too hot for him, he'd meant to gain time, to throw us off the scent altogether, by cumfoozlin' us inter goin' in one direction while he loped off on foot in another. Still, we weren't to be done; that trick made us keener set'n ever on ropin' him. So we fetched back to the turn-off, picked up his trail there again, an'-an'-wal, here we are !'

'Oh, that's it—oh!' I said, solemn as a lawyer. 'An' supposin' you'd let the mare alone—supposin' you hadn't brung her right along with you—where do you think she'd be now? Not back at the camp, mebbe, hey?'

'Ain't thought nothin' about such supposin's. But—yes, I 'low she'd have worked her way back to the camp after a while, safe enough.'

'An' by this time,' I went on, dotting the arguments down on my fingers—' by this time Jake would have got his animal back; he'd have had no complaint against the Britisher; consequent you'd have had nothing against him neither. An', come to figure it out, there'd have been no stolen horse at all!'

The boys were flummoxed over that logic; it hadn't struck them like that before. Then, as a clincher, I chipped in with the Englishman's yarn just as he'd told it to me.

'Sounds kinder reasonable, too,' Tom Snell

agreed, when I. finished. 'Blow me, if we haven't been a sight too hasty on the man. Can't see we've anything against him now—not

to speak of, mates.'

'Quit this tom-fool talk,' old Steve blurted out, choky with rage. 'What're we here for? Is this a meetin' of slack-jaw congressers, or is it for business? We shall be laughed outer the camp if we go back 'thout doing what we set out to do. No; we came here to hang—an', 'struth, hang we will!'

'Bravo, Steve!' I put in. 'That's good hearing, if you mean to begin on yourself.'

'Shut it, you young limb!' he snarled, glaring at me. 'But for your blame interferencin' we'd have done our duty on the Britisher an hour since. Even if what you say is book-truth—an' I've my doubts—that don't clear the skunk, does it? Didn't he kill poor Cy? Now ain't that murder? An' ain't a murderer to swing? Ain't that accordin' to high-tone law?'

'Dunno much 'bout law,' growled Tom, shrugging his shoulders. 'From what I made out, it was fair an' honest shootin' between Cy an' the Britisher. Anyways, that's not our department. We ain't no sheriff's posse yet. An' besides, if 'tis law—bust me, 'tain't sense!'

'Nother thing—'tain't true, either,' I interrupted, slapping down my trump card. 'Tain't true—not about the Britisher being a murderer! 'Cause why? 'Cause Cy ain't any more dead'n you are!'

I waited till they had found their breath again.

'Listen to this now!' I went on. 'Directly after you had started out yesterday, Uncle Neil gets Sam Hindes into the saddle an' told him to ride like blazes for the surgeon at Themis City. Four o'clock this morning, when they came back into camp, the sawbones hooks the bullet out of Cy's ribs, patches him up, an' says he'll be right as razors in less'n a week. Cy dead? Shucks, if you'd heard his language you wouldn't ask! When they told him you were out after the Britisher, he ups an' rips an' cusses the whole caboodle of you for a crowd of tarnation idiots. An' the words he laid his tongue round were real blisterers'—

'Us! He cussed us? What for?'

'For meddling with his concerns at all. He lowed he was to blame all through—him having monkeyed with the Britisher about his nationality, an' where he was raised, on purpose to get the tenderfoot's wool off. Well, at last he did it. The Britisher hits him a fillip with his fist like the kick of a colt's hind-leg, which stretched Cy out straight an' set his head going like a buzz-saw. You bet Cy must have been hurt an' riled above a bit or he would never have drawn on a man that was walking away. Hows'ever, just then the Britisher happened to look back an' see how things was shaping; his hand whips round to his hip-pocket—an' that's

how! Cy's willing to apologise handsome as soon as—— Hullo, Steve, what's up now?'

Steve never spoke, but just climbed into his saddle and shoved his horse round for home. Yet he hadn't gone far before he thought better of it and came back. I never saw a man look more disgusted in my life.

'Strikes me, boys,' he snorted, 'as how thishyer funeral party is an all-fired fizzle. Somebody's been playin' it a'mighty low down on us. I don't remark who 'tis—on'y somebody. Say, kid, just you skip up an' tell the Britisher we're all friends here. Tell him to come outer that; tell him we want to shake. Then, rot it, let's git!'

OUR CHILDREN.

We learned from our wistful mothers To call Old England 'home.'—Kipling.

'Mother, the spring is coming!
Down by the vlei-side now
You can see the green on the willow,
The gold on the wattle-bough;
You can watch the caps on the blue-gums
Swinging against the sky;
By-and-by they will scatter
Their sweet white tufts from high.

'The aloes are out on the kopjes,
The "soldiers" yellow and red,
And between the dry thorn-bushes
The veldt-lily shows its head.
Mother, the spring is lovely!
See, we found in our roam
Cotton-pods, green and silky—
Is it just as lovely at home?'

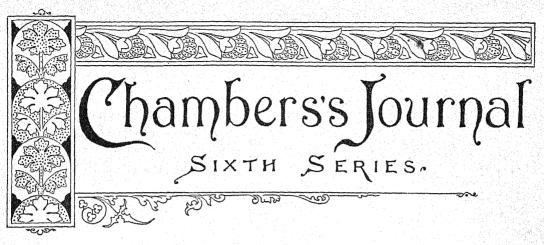
'Children,' the mother answers
(And her eyes see across the years),
'At home the sweet spring country
Is green with April's tears.
There are daffodils in the meadows,
There are violets in the lane;
The cuckoo calls thro' the orchards
'Midst blossoms that fall like rain.

'The bluebells swing in the breezes,
The cowslip scents the air,
The primrose and the foxglove
Make every hedgerow fair.
At home the happy children,
All thro' the sweet spring day,
Weave garlands for their crowning
In ever-changing play.'

'We do not know of the euckoo,'
Our children make reply;
'But we see the great asvogels
Apoise in the cloudless sky.
We cannot gather the primrose,
Nor cowslip garlands wear;
But our golden melon-blossoms—
Have they flowers at home so fair?'

O children! O happy children!
You will never know what you miss.
A child's pure heart for ever
Makes its own world of bliss!
And you, O wistful mother!
Tho' afar in fancy you roam
To the sweet spring-land o'er the water,
Yet your heart stays here in its home.
B. M. Browley.

Orange Free State.



LIVERPOOL:

ITS PRIVATEERS AND ITS SLAVE-TRADE.



VERPOOL, now ranking as the second city of the empire, is in some departments of enterprise hardly second to the metropolis itself. At the end of the seven-

teenth century it had but 5000 inhabitants. Its extraordinary growth next century was due to the rapid development of its foreign trade, and is illustrated by the fact that, whereas in 1697 the port possessed only eighty ships, in 1760 the number was 1245. The northern port was rapidly superseding Bristol. Two very important elements of Bristol's maritime enterprise were privateering and the slave-trade; in both departments Liverpool was destined greatly to outshine its older rival. The history of these two sources of Liverpool's wealth and prestige, as related by Mr Gomer Williams in his book on Liverpool Privateering and the Liverpool Slave-Trade, is curious and instructive, not only in reference to Liverpool itself, but to the country at large.

The first mention of privateering-possibly in this case piracy-in connection with Liverpool is in the year 1563, when a ship belonging to Sir Thomas Stanley, son of the Earl of Derby, brought a prize into the Mersey amid 'great rejoicings.' It was in the reign of George II., however, that privateering was taken up as a business enterprise by the Liverpool merchants. From an early period of the reign British merchant-ships -mostly engaged in contraband trade, it must be admitted-had been plundered and their crews maltreated by the Guarda Costas of Spanish America. These outrages, committed for some years without remonstrance from the British government, at length roused the indignation of the whole country. The government were forced to take the matter up, and demands for compensation were made to the Spanish Court. demands were rejected, and Letters of Marque and Reprisal, authorising British subjects to seize and take the vessels and goods of the enemies of Great Britain, were granted against the Spaniards; who, on their part, set about vigorously to defend themselves. The declaration of war against Spain in 1739 was the result, and in 1744 France joined in the conflict against England. In the latter year Liverpool possessed four privateers, which, during the war, captured about a dozen ships—a small set-off, however, to the round hundred sailing to and from Liverpool taken by the enemy.

The breaking out of the Seven Years' War in 1756 came as a blow to Liverpool, whose trade in 'black ivory' had been making prodigious strides. Swarms of French privateers found their way into the Irish Sea, and at one time actually blockaded the town for several weeks. Insurance rates went up enormously, and trade was practically at a standstill. The merchants, however, did not wait for ruin with folded hands. Taking the hint from the enemy, they not only fitted out their useless ships as privateers, but built new vessels for the service. These they let loose on the enemy's commerce, and the result was remarkable. One of the first privateers to leave the port returned in a few weeks with a French West Indiaman worth £20,000; other equally valuable prizes followed in quick succession. 'Then the whole country became mad after privateering, and the mania even spread to the Colonies. The French were equally energetic, and the result was that the seas became infested with privateers, capturing, plundering, and destroying merchantmen, and also each other. The Liverpool privateersmen, second to none in courage and seamanship, made many prizes; but on the whole the result of the war to the merchants was disastrous. In the first four years alone one hundred and fortythree vessels belonging to the port were captured by the French; and this more than counterbalanced the gains of the privateers.

The experiences of the Seven Years' War were repeated during the American War of Independence. The Americans at the outset sent forth a fleet of privateers, and soon the trade of Liverpool sank to small dimensions. Yet it was only when

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the French and Spaniards joined in the war that Liverpool entered with its old energy into the privateering business. But, once started, so great was the zeal displayed that between August 1778 and April 1779 one hundred and twenty private cruisers were fitted out. An entire stop was put to the commercial progress of the port, however; and 'beyond the occasional bustle of numerous sales by auction of the cargoes of prizes taken from the enemy, there was little business transacted.' It was, indeed, only the activity and success of the privateers that saved many of the Liverpool merchants from ruin.

After the close of the war Liverpool recovered itself with a bound; but only for ten years did peace endure, and the breaking out of the war with France brought back all the old dangers. Says Mr Williams: 'The old fighting instinct of Liverpool was revived in full force; but it does not appear that privateering was carried on to so great an extent, comparatively, from the port as during the American Revolutionary War. Many acts of bravery were, however, performed, and valuable prizes taken, by the officers and crews of Liverpool privateers and armed merchant-ships during this long war.' By July 1793 sixty-seven privateers were fitted out, and many more afterwards, with the result that an unprecedented number of prizes were taken. The French had their hands too full on land to devote much attention to the sea, and in three or four years their commerce was swept from the ocean.

The second American war (1812-14) was the last war in which Letters of Marque were granted by the British government, and by the Declaration of Paris in 1856 privateering was abolished. All civilised nations have now acceded to the Declaration except the United States, Spain, and Mexico.

The greatest of Liverpool's privateering heroes —and there were many who might be styled heroes-was a personage famous in his day, and not yet utterly forgotten—namely, Captain Fortunatus Wright. Soon after the outbreak of the war with France in 1744, he, conjointly with some English merchants in Leghorn, fitted out the Fame privateer to cruise against the French. The Gentleman's Magazine for December 1746 stated that the Fame, Captain Wright, had captured sixteen French ships in the Levant, worth £400,000. Captain Wright's most remarkable achievement, however, was in 1756, when the renewal of the war with France became imminent. In that year he built a small vessel at Leghorn, called the St George, to cruise against the enemy. His project becoming known, a French xebec of sixteen guns and two hundred and eighty men bore down upon Leghorn, and hovered outside the harbour in order to capture him when he came out. So much injury had Wright done to French commerce during the last war that the French king had promised the honour of knighthood, a pension of 3000 livres per annum for life, and the command of a sloop-of-war to whoever should bring him into France alive or dead. The candidate for knighthood, therefore, impatiently waited for him. The Tuscan government, being at this time in close sympathy with the French, would not allow Wright to leave the port with more than four guns and twenty-five men. With this armament he left the harbour on the 25th of July, having three other small vessels under convoy. No sooner was he clear of the harbour, however, than he took on board other eight guns, which had been secretly stowed by the convoy for his use. He also prevailed upon fifty-five of their men, composed of Slavonians, Venetians, Italians, Swiss, and a few Englishmen, to enter on board his ship. Next morning the Frenchman bore down upon him, and at twelve o'clock the engagement began, in sight of about three thousand well-wishers of the French. In threequarters of an hour the xebec was so maltreated that she was hors de combat, with the loss of her captain, lieutenant, and eighty-eight men killed, seventy more being wounded. There being no wind, she escaped with the aid of her sweeps, else she would have fallen a prey to the victor. Wright had only lost his lieutenant and four men killed, and eight wounded. The disgusted Tuscan authorities immediately seized the St George, and refused to give her up; but the appearance at Leghorn of Admiral Hawke, with two line-of-battle ships, speedily induced them to a more complaisant frame of mind. After further distinguishing himself at the expense of the French, the brave Captain Fortunatus Wright was lost with his ship in a storm, in March 1757, while on a voyage from Malta to Leghorn.

Privateering was not a profession calculated to instil a love of law and order among its votaries. The privateersmen, when they came into port, were the terror of the town, and committed many excesses. So outrageous did their conduct become that, in 1778, the Mayor of Liverpool issued a proclamation cautioning these lawless persons that he would in future call in the aid of the military for the protection of the lives and property of the peaceable inhabitants. This had the desired effect. The service was popular; the men shipped on board privateers being safe from impressment, the most dashing and daring of the sailors came out of their hidingholes to enter on board them. These doughty old sons of Liverpool are thus described by one who wrote from personal observation: 'They were a reckless, dreadnought, dare-devil collection of human beings, half-disciplined, but yet ready to obey every order, the more desperate the better. Your true privateersman was a sort of half-horse, half-alligator, with a streak of lightning in his composition-something like a man-of-warsman, but much more like a pirate-generally with a superabundance of whisker, as if he held with Samson that his strength was in the quantity of his hair.'

A privateer captain was not permitted to range the ocean at his own sweet will in search of booty. His owners selected his 'beat' for him—one, of course, frequented by passing vessels.

'Did privateering pay?' is a question asked by Mr Williams. In individual cases sometimes it did, and sometimes it did not; for it must not be forgotten that privateers themselves were often captured or roughly handled without any return for the damage done. 'A victory or a defeat made a man who was rich in the morning poor at night, or suddenly raised another from poverty to riches.' It was, in fact, a lottery. In the aggregate, it is doubtful if privateering was a paying enterprise, except in so far as it enabled the merchants to partially recoup themselves for losses suffered at the hands of the enemy.

There is no question, however, that the other branch of Liverpool's enterprise, the slave - trade, was a paying industry, especially in its later years. The first Englishman who engaged in the African slave-trade was Sir John Hawkins, but it was not until 1623 that it was taken up extensively as a regular business. The great wealth of the merchants of London and Bristol enabled these cities for some time to enjoy a practical monopoly of the traffic. Liverpool during the seventeenth century was too poor to participate; but early in the next century a successful rivalry with Bristol in exporting provisions and Manchester goods to the West Indies caused a decline in Bristol's West India trade. Bristol, to make up for this loss, entered the more eagerly into the slave-trade, and quickly caused a serious decline in the London slave-trade, so that the Severn became the headquarters of the traffic in Great Britain. Liverpool, meanwhile, had developed an extensive and most profitable contraband trade with the West Indies, but this was put a stop to by the Grenville treaty in 1747. No sooner was one door closed to the Liverpool merchants than they opened another; they entered into the slave-trade with a zest which in time bore heavily upon Bristol. 'For a period of seventy-seven years,' says Mr Williams, 'they carried on the trade with a characteristic vigour and ability that outdistanced every competitor, and won for Liverpool the unenviable distinction of being the chief slaving town of the Old World.' The chief cause of this predominance was that the Liverpool merchants, by what might be called a cheeseparing policy in the fitting out of their slavers, in the wages of their seamen, and in various other directions, were enabled to dispose of their 'prime negroes' at from £4 to £5 per head less than the merchants of Bristol and London. In 1752 Liverpool possessed eighty-seven slavers, with a carrying capacity of 25,000 negroes; but 'the number shipped, if not actually delivered, "in good order and condition," was probably much higher, as it was then customary to overload, with the most frightful results.

But the traffic was not confined to the Colonies and foreign parts. Slaves were imported into and sold in England itself. In the newspapers of the period were many advertisements of sales of negroes by auction. A Liverpool paper in 1766 announced: 'To be sold at the Exchange Coffee-House in Water Street, this day, the 12th instant September, at one o'clock precisely, eleven negroes, imported per the Angola.' Slavery in England was abolished in 1772 by the famous dictum of Lord Mansfield in the case of the negro Somerset, who had deserted from his master's service: 'As soon as a slave sets foot on the soil of the British Islands he becomes free.'

The slave-trade itself died hard. The movement for abolition began to take form about 1770, and in 1788 the Abolition Society had its foot in Liverpool. Naturally those interested in the traffic were up in arms, and the contest grew fierce. As the power of the abolitionists grew, the resentment against them became more bitter, until their lives were not safe in the streets of Liverpool. None were more active in resisting the movement than the Corporation, who considered the vital interests of their city at stake. They granted annuities, presented the freedom of the city, and did other honours to the champions of their cause. In October 1799 the Recorder, with a committee of the Council, attended at St James's Palace, and presented H.R.H. the Duke of Clarence (afterwards William IV.) with the freedom of the borough, 'in grateful sense of his active and able exertions in Parliament' on behalf of the slave-trade.

The slave-trade was declared illegal in 1807, and it was thought that Liverpool was ruined. 'The whole community were terror-stricken. The docks were to become fish-ponds, the warehouses to moulder into ruins, grass was to grow on the local Rialto, the streets were to be ploughed up, and Liverpool's glorious merchant navy . . . was to dwindle into a fishing-vessel or two.'

As has already been hinted, the emoluments of the traffic were large. Mr Williams calculates that during the eleven years 1783-93 the net amount remitted from the West Indies to the Liverpool merchants for 305,737 slaves was £12,294,116, or an average of £1,117,647 per year. To give an instance of individual profit: one firm, importing 2850 slaves, received a net profit in one year of £26,849. The former net sum does not take account of the prime cost of the slaves on the African coast. In the later years of the traffic a slave sold for about—after deducting factor's commission (five per cent.) and other expenses—£40, 10s.; the prime cost was £27, 5s.; freight and maintenance, £3, 15s.—making £31, which left a profit of £9, 10s. Certainly a profit of about thirty per cent. was a handsome one.

A bill of lading for slaves was a curiosity in its way. The following extract is from one dated 1st February 1766: 'SHIPPED, by the Grace of

God in good order and well conditioned, by James -, in and upon the good ship called the Mary Borough, whereof is master, under God, for this present voyage, Captain David Morton, and now riding at anchor at the Barr of Senegal, and by God's grace bound for Georgey, in South Carolina, to say, twenty-four prime slaves, six prime women slaves,' &c. It ends with the pious wish that 'God send the good ship to her desired port in safety. Amen.' However impious it may appear to us to associate the name of God with the iniquitous traffic, still it was looked upon by many as a divine institution, directly sanctioned by the Bible. The famous slave-trading captain, John Newton, afterwards to be the Rev. John Newton of Olney, hymn-writer and friend of Cowper, did by no means see it to be his duty to change his profession immediately after his conversion, though he ultimately became an abolitionist; he carried on slave-trading for years after he was a devout Christian, giving thanks in the Liverpool churches for the success of his last venture, and imploring God's blessing on his next.

The horrors of the middle passage have been so often painted that it is needless to dwell upon them here, except that the worst that can be said of them is in no way exaggerated. Still, one instance of atrocity may be worth giving. In 1783, in a case in which the underwriters

were the defenders, it came out in evidence that the 'cargo' of a slave-ship called the Zong was very sickly. The captain proposed to the mate to throw the sickly slaves overboard, as, if they died a natural death, the loss would fall upon the owners, whereas if they were thrown into the sea the loss would fall upon the underwriters. The suggestion was carried out. One hundred and thirty-two of the most sickly were selected, fifty-four were thrown overboard, and forty-two the next day. A few days later the remaining thirty-six followed the rest.

It must not be supposed that, because the slave traffic was an atrocious institution, all who engaged in it were monsters of iniquity. On the contrary, many of the owners of slave-ships were upright and public-spirited men, just and humane in their dealings with their fellow-men. They saw no wrong in the slave-trade. As Mr Williams says: 'However we may detest the trade and shudder at the horrors which necessarily accompanied it, even when most rigorously supervised and conducted by the most humane instruments; though we know that no casuistry can convert wrong into right, yet must we remember that custom has a wonderful effect in blinding the moral perceptions; that men's standard of morality is being raised as the leaven of Christianity spreads.'

JOHN BURNET OF BARNS.

CHAPTER XIX.-HOW I RODE TO THE SOUTH.



HE night was full of wind, light spring airs which rustled and whistled down every street and brought a promise of the hills and the green country. The stars winked and sparkled above me:

but I had no mind to them, or aught else, save a gray house in a wood and a girl sitting there with a heavy heart. Faith, my own was heavy enough as I led Maisie through the West Vennel, shunning all but the darkest streets, for I knew not when I might be challenged and recognised, losing my way often, but nearing always to the outskirts of the town. Children brawled on the pavement; lights twinkled from window and doorway; the smell of supper came out of chink and cranny. But such things were not for me, and soon I was past all, and near the hamlet of Liberton and the highway to Tweeddale.

Now there was safety for me to mount, and it was blessed to feel the life between my knees and the touch of my horse's neck. By good luck I had found her saddled and bridled, as if some careless, rascally groom had left her untouched since her arrival. But I would have cared little had there been no equipment save a bridle-rope. I could guide a horse on the darkest night by the

sway of my body, and it was not for nothing that I had scrambled bareback about the hills of Barns. Maisie took the road with long, supple strides, as light and graceful as a bird. The big mass of the Pentlands loomed black before me; then in a little it fell over to the right as we advanced on our way. The little wayside cottages went past like so many beehives; through hamlet and village we clattered, waking the echoes of the place, but tarrying not a moment, for the horse was mettlesome and the rider had the best cause in the world for his speed.

Now this errand, which seems so light, was in reality the hardest and most dangerous that could be found. For you are to remember that I was a man proscribed and all but outlawed; that any chance wayfarer might arrest me; and since in these troubled times any rider was suspected, what was a man to say if he saw one dressed in gentleman's apparel, riding a bloodhorse, coatless and hatless? Then, more—all the way to Peebles lay through dangerous land, for it was the road to the south-west and the Whigs of Galloway; and since the Pentland Rising that part had been none of the quietest. Also, it was my own country, where I was a well-kenned man, known to nearly every one; so what might have

been my safety in other times was my danger in these. This, too, was the road which my cousin Gilbert had travelled from Barns, and well watched it was like to be if Gilbert had aught to do with the matter. But the motion of my horse was so free, the air so fine, the night so fair, and my own heart so passionate, that I declare I had forgotten all about danger, and would have ridden down the High Street of Edinburgh, if need had been, in my great absence of mind.

I was recalled to my senses by a sudden warning. A man on horseback sprang out from the shelter of a plantation and gripped my bridle. I saw by the starlight the gleam of a pistol-barrel in his hand.

'Stop, man, stop! There's nae sic great hurry. You and me 'ill ha'e some words. What ha'e

ye in your pouches?'

Now I was unarmed, save for my sword, and the footpad before me was a man of considerable stature and girth. I had some remnants of sense left in me, and I saw that I had no time to draw my weapon. I foresaw, too, that if I closed with him, besides the possibility of getting a bullet in my heart, the contest would take much time and would have an uncertain ending. I was fairly at my wits'-end, what with hurry and vexation, when the thought struck me that the law and military which I dreaded were also the terror of such men as this. I made up my mind to throw myself on his mercy. Forby, being a south-country man, the odds were great that my name would be known to him.

'I have no money,' I said, 'for I came off this night hot-speed, with a regiment of dragoons waiting behind me. I am the laird of Barns in Tweeddale, and this day an outlaw and a masterless man. So I pray you not to detain me, for there's nothing on me worth the picking. I have not a great of silver, and, as you see, I

ride in my shirt.'

'Are ye the laird o' Barns?' said the man, staring. 'Man, I never kent it, or I wadna ha'e been sae unceevil as to stop ye. Be sure that I'm wi' ye, and sae are a' guid fellows that likena thae lang-nebbit dragoons and thae meddlesome brocks o' lawyers in Embro'. Gang your ways for me. But stop; ye've nae airms. This 'ill never dae. Tak' yin o' my pistols, for I'll never miss it. And see, gin ye tak' my advice, and gin ye're gaun to Barns, gang off the Peebles road at Leadburn, and haud doun by the Brochtoun and Newlands ways, for a' the way atween Leadburn and Peebles is hotchin' wi' sodgers and what-ye-may-ca'-thems. Guid-e'en to ye, and a safe journey.' The man rode off, and almost instantly was lost to my sight; but his act gave me assurance that there was still some good left in the world, though in the most unlikely places.

And now I saw before me the black woods of Roslin and Hawthornden, and in the near distance the roofs of the clachan of Penicuik. There

I knew danger would await me; so, taking a random turning to the right, I struck towards the hills in the direction of Glencorse. The place was rough and moory and full of runlets of water; but Maisie was well used to such land, for it was no worse than the haughs of Manor, and level turf compared with the brow of the Deid Wife or the shoulder of Scrape. So in a little, when the lights of Penicuik were well on the left, I came to the Hawes Burn, which passes the inn of Leadburn, and tracking it downward, came to the bald white house which does duty for a hostel.

I dared not enter, though I was woefully thirsty, but kept straight on to the cross-roads, where the two paths to Tweeddale part. One—the way by which I had gone when I set out on my travels-goes over the moor and down by the springs of the Eddleston Water, through the village of that name, and thence down the vale to Peebles. The other, longer and more circuitous, cuts straight over the rough moorlands to the little village of Newlands, then over much wild country to Kirkurd and the high hills which hem in the hamlet of Broughton, whence it is but five miles to the house of Dawyck. It is a road which I have always hated as being dismal and wild beyond any of my knowledge; but now I was glad to be on it, for every step brought me nearer to my love.

In a little I saw a hill-top, which by its broad, flat shape I knew for the Black Mount, which lies above the village of Dolphinton on the way to the west country. This is a landmark of great note in the countryside, and now I could guess my whereabouts. I made out that I must be scarce two miles from the jumble of houses lining the highway which is named Kirkurd, at which spot the road fords the deep, sullen stream of Tarth. Now this same Tarth a little way down flows into the Lyne, which enters the Tweed almost opposite the house of Barns. At other times I had ridden the path down its side, for it is many miles the shorter way. But I knew well that Barns would be watched like the courtyard of the Parliament House, and I durst not for my life venture near it. I deemed it unprofitable to run the risk of capture for the sake of an hour or two saved; so, after passing Kirkurd, I held straight on over the black moors which lie towards the watershed of the Broughton Burn.

Now, by good luck, I had dismounted just after the bridge, and buckled Maisie's girth tight and eased the saddle, for I suspected that now I was entering a more dangerous country. The issue showed that I had guessed rightly, for, just at the sharp turn of the road over the Hell's Cleuch burn, I came near to my end. I was riding carelessly at a rapid pace through the thick wood of pines which cloaks the turn, when suddenly, ere ever I knew, I was into the middle of a detachment of horse riding leisurely in the same direction.

I do not well know how I acted, save that my

pistol went off in the mélée, and I saw a man clap his hand to his shoulder in a vast hurry and swear freely. Half-a-dozen hands were stretched to my bridle; half-a-dozen pistols covered me at once. Now I had no leave to move my sword, my pistol I had fired, so I was wholly at their mercy. What happened I can only guess, for I was in too great a flurry to have any clear remembrance of the thing. I was conscious of striking one man fiercely on the cheek with my empty pistol, and of kicking another on the shins with all my might. But my sudden appearance had startled the horses so thoroughly that all the dragoons' time was taken up in curbing them, so they had no leisure to take aim at me. A dozen shots cracked around me, all going high into the air, and in a second I was through them and on the high-road beyond, some twenty paces in advance.

But by this time they were getting their horses under, and I felt that there was no time to be lost if I wished to see many more days on earth. I patted Maisie's neck, which to a horse of her spirit was the best encouragement, and set myself to a race for life. I kicked off my great boots to ease her, and then leaning forward, the trial of speed began. Behind me I heard shouting and the beat of horses getting into their stride. Before me was the long, thin highway, and black hills, and endless peat mosses. I had half a mind to leave the road and ride for the hills, where I made sure no man of them could ever follow me. But I reflected that this would shut for me the way to Dawyck, and I should have to lie hid in these regions for weeks, for when my path was once seen they would guard it more closely. My only chance was to outstrip them, and so keep the country open before me.

Now began the most terrible and desperate race that I was ever engaged in. I had tried my cousin Gilbert and beaten him on the side of Scrape; now his men were taking revenge for that episode in good earnest.

Maisie responded gallantly to my call. I felt her long, supple swing below me, and the vibration of her limbs. I began to glory in the exhibitation of the thing, and my spirits rose at a bound. The keen, cool air blew about my face, the moonlight danced on the horse's neck, and the way in front was a long strip of light.

But this braggadocio exhilaration soon passed, and in its place came some measure of forethought. I reflected that, though I might distance my pursuers and win to Dawyck, I would surely be tracked, and so bring misfortune on my mistress and myself. I had as yet no clear plans for the future. I had already all but burned my boats, for this night's work was like to get me into trouble on its own account. The wild notion of fleeing to the hills and trusting to God for the rest commended itself to me more and more. But one thing I must do—abide at Dawyck till such

time as Nicol should be able to join us. I had the most perfect trust in him; I had proved him a hundred times, and I knew well that, if mortal man could do aught to mend my fortunes, he could do it. So with this thought I matured a plan for the present. I must put forth all my speed and win clean away from my pursuers. Now at Broughton there was an inn where abode an honest man, one Joshua Watson, who had oft had dealings with me in the past. He was an old retainer of our house, and I knew that he would see his roof and gear in a blaze before his eyes ere he would let any harm come to a laird of Barns. To him I purposed to go and hide till the dragoons had passed. They had not recognised me; this I knew, for they were not men of our countryside, and if left to themselves would keep the highway to Moffat and have never a thought of turning aside into Tweeddale.

I whispered something to Maisie, and the good mare set herself to the task. She was still unjaded, for I had used her to long wanderings, and she had not forgotten the lesson. I listened to her steady, rhythmical breath and the measured beat of her hoofs, and I thanked Heaven that I had chanced on her. At first the dragoons were maybe an eighth of a mile behind. Soon the distance increased, little by little at first, then by more and more as my mare got into her long gallop and their coarse beasts began to tire. We passed the little, lonely cot of Lochurd, nestling under great green hills, where the sheep bleat and the plovers cry alway. Then on by the lonely bog where men came once to dig marl and have left a monstrous wide pit filled with black water and with no bottom. I paused for a second to let Maisie drink from a burn which comes down from the Mount Hill. Soon we were at the turning where the road to Biggar and the west goes off from the highway. Here I stopped to listen for a moment. Far off and faint I heard the noise of my pursuers, and judged they were near a mile distant. Then off again; and now the road inclines downward, and as one rises over the crest of brae which the shepherds call the Rickle End, there bursts on the sight all the vast circle of hills, crowded and piled together, which marks the course of the Tweed. Down the little glen of Broughton I rode, while the burn made music by the highway, and it was hard to think that death awaited a little behind. Soon the moors sank into fields, trees and cottages appeared, a great stone mill rose by the water, and I clattered into the village of Broughton.

The place was asleep, and as I drew up at the inn but one light was apparent. I hammered rudely at the door till the landlord came, sleepy and yawning and bearing a candle in his hand. At the sight of me he started, for my danger was known over all Tweeddale. In a few words I told him of my pursuit and my request. He was a man of sparing speech, and, saying nothing, he

led me to the barn and showed me a hole in a great bank of straw. Maisie he took to the stable. 'Ha'e nae fear,' he said. 'Trust me; I'll settle the hash o' thae gentry.'

Sure enough, I had not been two minutes in the place when I heard voices and the sound of horses, and, creeping to the narrow unglazed window, saw the dragoons draw up at the inndoor. Much shouting brought down the landlord, who made a great show of weariness, and looked like one just aroused from sleep.

'Heard you or saw you any man pass on horseback about five minutes syne?' they asked.

'I dare say I did,' said he. 'At ony rate I heard the sound o' a horse, and it's verra likely it was on the Moffat road. There's a hantle o' folk pass by here at a' 'oors.'

'Ye're sure he didna come in here?' they said again. 'We'll search the house to see,'

'Weel,' said the landlord, 'ye can dae as ye like, but it seems a gey fule's errand. I tell ye it's lang past midnight, and we've a' been asleephere, and naebody could ha'e gotten in unless I had opened the door, for I ha'e a' the keys. But come and look, gentlemen, and I'll fetch ye some vill.'

They drank the ale, and then seemed to think better of their purpose, for they remounted. 'He'll be aff to the hills at the heid o' Tweed,' they said. 'He would never, gin he had ony sense, gang doon Tweeddale, where there's nae hiding for man or beast.' So, with many wanton oaths, they set off again at a lazy gallop.

THE WASTED WIND.



HERE are mighty rivers of air sweeping incessantly over the face of continent and ocean. The winds have neither source, shore, nor destination; they cannot be separately named and set down upon the

map; so that we easily forget their vast extent and immeasurable force.

We live most of our time among walls; our homes are set in hollows among the hills; our gardens are sheltered by trees. All the conditions of our life tend to hide us from the wind. We underestimate its power and its constancy a hundredfold. Yet a large proportion of the heat which comes to the earth from the sun goes to make wind, and the air flows with every variation of temperature.

There are three principal forms in which the heat of the sun is made available for mechanical work. It built up plants long ago which are now converted into coal; and when this is burned, the energy may again be taken out in the form of work. Then, the sun distils the ocean into rain, and this, descending in the streams, can be made to do work through water-wheels. And, lastly, the changing heat disturbs the air, and drives it over sea and land, to fill the sails of ships and to turn the arms of the windmill. The heat-engine, the water-engine, and the windengine are at present the three practical instruments of mechanical force. They are the only prime movers which have any economic use.

Of these three sources of work—coal, water, and wind—the last is the only one which can any longer be called the free gift of nature. In the article in Chambers's Journal for January entitled 'Water: the Modern Rival of Coal,' the action of the first two prime movers was described,

Coal must be bought, and water does not flow everywhere; but the wind goes everywhere, and no man owns it or can make a charge for its use. It is a river which is as wide as our country; it is an inexhaustible source of work. Yet this wind is wasted; you may travel fifty miles through the country without seeing an attempt to make use of it.

It is, indeed, used plentifully at sea. Innumerable ships are moving over all waters impelled neither by machinery nor by human effort. Many a well-built sailing-vessel will travel, in a good breeze, at speeds which come near to those attained by steam. The heat-engine has not yet driven sails from the sea; it will probably never succeed in doing so. But the use of wind at sea is attended by certain disadvantages which do not affect its use by a stationary wind-engine. A ship needs a crew, and the sails must be shifted to suit the direction of the breeze; they must be reefed as its strength increases. A crew, or any hired labour, is a very expensive element in the utilisation of force. Every man employed absorbs the interest on from one to three thousand pounds, and adds just so much to the capital sunk in the adventure. But a wind-engine needs no crew. It turns itself to face the wind without interrupting its action. It reefs its own sails when the breeze increases in force, and spreads them again to their full extent as the wind falls lighter. Oil it once or twice in the month, and your labour is done.

In point of fact, the wind-engine is the most economical of all prime movers. The coal and the water which work the others are, comparatively speaking, monopolies; the wind is free. But the motive-power of wind is subject to a special disadvantage. It does not always blow. From time to time, and for an indefinite number of hours, the wheel refuses to move at all. This cessation of work is quite irregular; it may happen at any time; its occurrence and its duration cannot be foretold. The great majority of people are

ready to condemn wind-engines at once on this ground alone. But it would be wiser to find out exactly how serious this undoubted drawback is; whether it is not vastly exaggerated, and whether it may not be overcome in such a manner that the wind-power shall still retain its character as the cheapest source of work.

The wind is fickle, but it is not so treacherous as is commonly supposed. Let us take a wind of ten miles an hour as the lowest 'working wind.' This is a breeze which we should call pleasant and brisk; it is sufficient to keep a loaded windmill continuously at work, though it will not develop its full power. Although many well-made wind-engines do a considerable proportion of their work under lighter winds, we must allow a ten mile breeze for a wheel which is running its normal load. We shall therefore neglect all winds of lower speed.

Now, there is a working wind for considerably over half the number of hours in a year. In some places there is such a wind for three-quarters of the whole time, while on the summits of the higher hills we get a still greater proportion of the year as suitable for the work of wind-engines. The following figures, calculated from Mr A. L. Morley's tables, will give us a more definite idea of the power which is available for work.

The records of Greenwich Observatory, at a height of 211 feet above sea-level, over a period of five successive years, show that the wind blew at a speed of ten miles an hour and upwards for 4824 hours out of the 8760 hours of the year. At Falmouth, at the same height and over a similar period, the wind blew ten miles and over for 6182 of the 8760 hours. At Edgbaston, at a height of 625 feet, over a period of six consecutive years, there was a wind of more than ten miles an hour for 5600 hours out of the 8760. That is to say, at Greenwich more than half, and at Falmouth nearly three-quarters, of the year consisted of working hours.

Similarly, one may reckon, as a rule, on an average of over eight hours a day of wind at sixteen miles an hour; and this supply of wind is well distributed throughout the twelve months. Thus, at Falmouth the wind is found to blow at a rate of sixteen miles an hour and upwards, as follows:

January	339	hours,	or about	11 hour	s a day.
February				10	
March	354	H.	11	11	NI CONTRACT
April	295		ıı ı	10	
May			11	8	11
June	N. 100 . 100	A COURT OF CASE	n	6	11
July	274	. 11	11	9	
August	Section 1 March 1981	and the second second	li e	9	
September	191	- 11	11	6	
October	257			8	
November	286			9	
December.	350			11	

It may therefore be regarded as certain that there is no lack of wind at any part of the year; and it is interesting to notice, in connection with electric lighting by wind-power, which is beginning to be recognised as an economical method, that the wind blows most in those months when most work is required of it.

To those who have no experience of the working of windmills, the motive-power appears to be too gusty and irregular to keep machinery going at that equal speed which is necessary both for its efficient working and for its preservation. But this objection is erroneous. In proportion to the elevation, the wind becomes comparatively smooth and equal. The gusts and squalls are mostly, although not altogether, due to irregularities and obstructions on the earth's surface, and at a height of even twenty feet, in an open position, they are largely eliminated. A ship at sea will preserve a constant inclination for many hours, and the clouds sail with a regular movement.

Further, the engine itself is a huge flywheel, with great inertia, and temporary fluctuations in the strength of the wind have no effect on the regularity of its revolutions. On a day when the wind seems to consist of a succession of squalls, a windmill may be seen to turn as steadily as the balance-wheel of a steam-engine. Again, a dynamo has recently been constructed which may be run with considerable variations of speed without impairing its efficiency.

The old-fashioned Dutch mill is well known as the type of wind-engine which was formerly common in many parts of Britain, and may still be seen at work in considerable numbers in the south and east. Its great arms, set in the form of a cross upon a huge shaft, are often forty or fifty feet in length. These 'whips' are fitted with frames covered with canvas, and the sails are reefed by the action of a governor, similar in principle to that of a steam-engine.

The tower, which forms the body of the mill, is divided into several stories, and is surmounted by a dome which is free to travel round on rollers, to bring the sails into the wind. This is effected automatically by means of a tail-wheel, or small set of sails carried on the dome at the side opposite to the axle. When the wind strikes the face of the tail-wheel its revolution brings the dome round upon the tower, until the great sails are set square to the wind. The 'windshaft' which carries the whips turns a vertical shaft, set in the midst of the tower, and so transmits its motion to the mill-stones and other machinery below. Mills of this type, although they develop good power-often as much as eight horse-power in an average breeze—are very inferior to the modern engine. The latter is at once lighter, stronger, and cheaper for the work which it will do.

Instead of four arms, it presents to the wind a circular sail, called the wind-wheel. This wheel is formed of from six to twelve radial arms,

which are joined by frames. It carries from twenty to over one hundred vanes or slats, each of which lies in the radial position, and is set at an oblique angle to the wind. A much greater surface is thus afforded for the motive-power than was the case in the older type of mill.

The wheel is kept facing the wind by means of a rudder, which is a single large vane projecting behind the wheel, and is driven from the wind like the vane of a weathercock; or, as is usual in the case of larger engines, a tail-wheel or rotating set of vanes is employed, like those familiar to us in the Dutch mill.

There are several methods by which the modern machine may be reefed. The whole wheel may turn bodily away from the wind, in proportion to the increasing pressure, as in the case of the 'Little Briton' wheel; or the frames containing the slats may be drawn back at their inner ends by the action of a governor. This method

is often employed in America. But probably the most sensitive, and quite the strongest, method is that employed in Titt's Simplex Engine, in which each slat is separately hinged at its two ends, and is automatically turned by any excess of wind. In a sharp gale only the edges of the slats are offered to the pressure, and the air rushes harmlessly through a skeleton wheel. The slats may also be turned in the same way by a lever at the foot of the tower, so as to keep them at any desired angle, or to throw the surface completely open, and thus to stop the wheel altogether. The best angle of the slats depends upon the force of wind, the load of the engine, and the desired speed: and it is important that this angle, in certain classes of work, should be capable of easy modification by the wheel-master. This wheel is started, regulated, and stopped as easily as a steam-engine.

Wind - wheels may be erected on the roofs of buildings, or on steel trellis towers, or on wooden masts. It is important that the machine should be as free as possible from the shelter of neighbouring trees and houses; and in any case a certain elevation is desirable, because the wind is always considerably stronger twenty feet from the ground than at six or eight feet. In good situations a tower of from twenty to thirty feet is sufficiently high.

The vertical driving shaft descends to within a few feet of the ground, where it is geared, by means of bevelled cogs, to the horizontal shaft which drives the machinery by means of belts or other gearing. It is well to see that the shafting and gearing is as light as possible, for energy may easily be wasted in ill-fitting belts or unnecessarily massive shafts; every ton of shafting absorbs at least one horse-power to move it. The driving shaft is usually fitted with a movable coupling, so that the machinery may, at any moment, be thrown instantly out of connection with the wheel.

The power of the wind may be profitably applied to many purposes. A small wheel, for instance, of sixteen or twenty feet in diameter, on an estate or farm, will drive the sawmill and do all the cutting, crushing, and grinding by means of the barn machinery, thus saving much labour of men and horses. In the island of Barbadoes, which is devoted to sugar-growing, there is a windmill at every plantation, and all the machinery of the factory is driven by its means. Wherever there is work which may be done when the working wind is blowing, and left during periods of calm, the wind-wheel, directly geared to the machinery, is by far the cheapest mover.

The wheel is most largely used, however, for pumping water. Thousands may be seen along American railway lines raising water into the tanks at the stations; and this method of securing a constant supply at almost no cost is beginning to make its way in Britain. For instance, the problem of supplying the village of Hopeman, near Elgin, with water has been solved by means of the adoption of the Rollason Wind Motor, which in twenty-four hours had pumped 56,000 gallons of water into the water-tank to supply the village. 'In some single cities of America,' says Wolff, 'over five thousand windmills are manufactured, on an average, each year.'

The same author finds, from the study of the actual performances of a great number of wheels, that the 25-foot engine will raise 12,743 gallons of water to a height of 25 feet in one hour of a sixteen mile breeze; and that it will do this for an average of eight hours a day, with no further expense than the interest on its first cost and. the depreciation on a durable machine. Labour is limited to the filling of its oil-cups once or twice in the month. Mr Titt, of Warminster, who is the best authority on the subject in this country, finds that the 14-foot wheel will deliver daily 10,000 gallons of water at a height of 100 feet. Since a 25-foot wheel, with its tower, costs about £180, and the 14-foot wheel, with its tower, costs £75, it must be admitted that these results are obtained at very small cost. In the case of the larger wheels, developing from five to thirty or more horse-power, the economy is proportionally

The following pumping-wheel is described fully in the journal of the Royal Agricultural Society of England for June 1897. It is on the estate of Lord Spencer, in Northamptonshire. It is 30 feet in diameter; it raises water from a boring 200 feet deep, for the water-supply of two villages one mile apart and for the adjacent pastures. This engine has been running for four years without any danger of failure of water through failure of wind-power. With a wind of sixteen miles, it raises 1350 gallons per hour from this great depth, and it works continuously with a wind of ten miles. It is estimated to raise, in

the course of a year a total supply of nearly six million gallons to a height of 200 feet. The cost of this tower and wheel was £275; it involves practically no expense for attendance.

Such recorded performances are sufficient proof of the incomparable cheapness of wind-power for all such purposes as pumping water-supplies, irrigation, or the draining of marshy ground. One may say, indeed, that this is the only economical method of raising water; for the hydraulic ram cannot, in the majority of cases, be applied. And the secret of its cheapness is threefold: a simple and durable machine, no fuel, no attendance.

But we may perhaps look for the greatest future development of wind-power, not so much in the direct driving of machinery or pumps as in the generating of electricity by means of the dynamo. The recent improvements in the transmission of electric power have opened up an immense field for an economic prime mover; and the wide utilisation of the wind-wheel for this purpose, suggested by Lord Kelvin in 1881, has already come into the region of practical possibility. It is now possible to erect the machine on the most favourable site, and to transmit the energy which it develops to the places where it is to be used. The supply can be sent to motors or to lighting installations at a distance from one another in the proportions in which it is needed. During the periods of working wind the surplus energy is stored in accumulators against the time of calm.

The cheapness of the electrical transmission and subdivision of power consists in several advantages, but chiefly in the fact that no more power is used than is actually needed. In a steam-driven factory the engine must be kept going whether it is fully loaded or whether only a small proportion of the machinery is actually running. The shafting is driven all the time, the boiler has to be kept at its proper pressure, and there is always a serious leak of power in belting. The total loss of power is often considerably over fifty per cent.; in not a few cases it has been found to exceed seventy per cent. But where a motor is used for each machine no unnecessary work is done. If only

one machine is being run no more power than is sufficient to drive it is consumed; if twenty machines are started there is immediately enough power for them all.

A further economy is secured by the ease with which power can be carried to a distance, so that work may be done in any required place. A good example is found in the electric plough, which, in certain German experiments, has proved itself very economical. An insulated cable is laid temporarily across the fields to where the plough is working, and power is transmitted to it from the home dynamo. Wind-driven electric stations in rural districts would find no lack of demand for power over an area of two or three miles' radius, and its distribution would be comparatively simple and inexpensive.

Since the Post Office has employed motor-cars in a daily service, and electric cabs are running in London streets, it may be assumed that these vehicles have entered on a serious stage of their development. The electric car is that form which is at once the safest, quietest, and the least subject to vibration. But its extensive use is hindered by the impossibility of obtaining power except in the largest centres of population. There is no doubt that before long there will be a large demand for the supply of electricity at stations in the smaller towns and at intervals along the great roads. If this comes about, it is likely that the supply will be obtained from the only source of power which is equally obtainable all over the country.

Installations of this kind are already at work, and have proved themselves to be successful and economical. There is, for instance, near a country house in the Midlands a 35-foot wheel of the Simplex pattern. This engine supplies light to two hundred sixteen-candle power incandescent lamps, and by means of several motors works stable and dairy machinery, pumps water for the house, and drives various agricultural machines at a farm half-a-mile away. A ten-horse-power dynamo is used, and is found to run at its normal speed for an average of over eight hours in the day.

THE HUSBAND OF MILLICENT.

CHAPTER III.



ILLICENT packed her portmanteau, taking a good many more things than were necessary for only a few days. 'One never knows what one may want,' she said to herself in excuse.

She settled any business connected with the parish, and gave the servants directions about

cleaning the rooms. 'They want turning out badly,' she said, a little bit apologetically, to Sarah; 'you will do it better if I am away.'

Everything was ready, and she had about halfan-hour to wait before the dogcart would come round. She sat down in the drawing-room and took up a book, and tried to feel cool and composed.

She assured herself she was doing a most sensible thing-a wise and well-considered act of which every one, if they knew, would approve.

They could not fail to approve, at least all persons of new and enlightened ideas. Several important writers had lately shown how dignified it was on such occasions to go away. The day

of patient Griseldas was past.

She was in the midst of these reflections when the afternoon post came in. Amongst the letters was one in her husband's handwriting. She looked at it for a moment. She felt half-inclined to put it in her pocket and read it in the train. She had a lurking fear that some sentimental feeling for the writer might be aroused and make her repent her decision. On second thoughts, however, she opened it, and rather impatiently scanned the contents.

Her father-in-law was still very ill. Henry hoped, however, to get away soon for a day or two. Some one was coming to take his place. He mentioned a few other matters, and asked some questions about the parish. And then came something which made her hands tremble and the colour mount to her cheeks: 'You mentioned the locked room next the study in one of your letters. I was in a hurry when I answered. I believe I asked you not to go in. I wanted to show it to you myself. Well, I will tell you about it. I have often been on the point of doing so; but it is connected with a part of my life which I have to shut away. I try not to think about it. You know I entered the Church at my mother's wish. My brother was alive then. The second son has always gone into the Church in our family. She was dying, and I would have promised her anything she asked. But I did not know how hard it would be. I tried serving two masters at first. But it would not do. I had to give it entirely up. I hope she knows what it has been. I think perhaps it is better to write and tell you all this. You will understand how I was obliged to lock it all away. I do not often go there, only now and then, and dream of what I might have done. I allow myself that. Go yourself and see. The key is in my writing-table drawer, at the back.'

Millicent sat quite still for a few moments, the letter clasped between her two hands. Presently she got up and went out into the hall. She listened for an instant; then she walked upstairs

She found the key and fitted it into the lock. The door opened and she went into the room. The shutters were closed, and only streaks of light filtered through the chinks. She hastily undid them and threw them open. Then she looked around. What should she see?

It was very simple. It had the appearance of an artist's studio for many years disused. The dust lay thick upon everything, and there was a faint, hardly perceptible smell from the neglected bottles of oil and varnish which stood in rows upon the mantelpiece.

Leaning against the sides of the room were innumerable canvases and stretchers, many of them turned away so that only their backs were visible. Amongst them were several studies of heads and unfinished portraits, showing considerable feeling and power. Upon the walls were some finished works in frames-an old man's head, some Venetian girls, some portraits of children.

A litter of charcoal sketches lay upon a table; there was a palette covered with dingy daubs of colour, cracked, dusty, and dry; and there were brushes and tubes of paint and implements of various kinds.

Upon the floor were some old Eastern rugs, and lying in a heap upon a sofa were some faded draperies and pieces of embroidery. Upon a ledge which ran around one side of the room was a row of plaster casts.

And there were books-shelves filled with books-books on art, French novels, books that had been books of the day; and near the fireplace was a low, luxurious arm-chair, with a pipe-rack and cigar-box close at hand, and a quaint old carved ash-tray.

Millicent scanned everything. She noted every detail with eager, curious eyes. Her cheeks were flushed. The reaction from the state of mind in which she had been made her brain feel quite

'So this is his secret. I have been very-foolish,' she said to herself at last. And then she came suddenly to a pause. She had forgotten time and everything since she entered the room. Now her ear caught the sound of wheels coming round; and, going quickly to the window, she saw the dogcart draw up at the hall-door.

There was her box ready to be put behind, and Sarah standing on the steps with her bag and her fur cloak. And who was that talking to Jackson? The angle of the jutting-out wall below hid some one who had just come up. A sudden curiosity seized her. She opened the window cautiously and looked out.

It was Henry-he had actually come home! There he was, looking at her box, and asking who was going away. They were telling him!

Millicent gasped. What should she do? What

would he think?

And there was the cold, little reproachful note she had written to him, lying upon the halltable! It was too late to get it back. He would see it now. He would see it; and what would he think?

She stood for a moment helpless and miserable, staring blankly out of the window.

'How can I ever explain?' she muttered to herself. 'How could I have been so wicked? It will look as if I was running away-almost eloping,' she added under her breath. 'Leaving the parish just when I was most wanted; and the Sunday schools, and the Mothers' Meeting, and the sick people. He will never think anything of me again.

'At any rate I will take off my things,' she said after a pause; and she hastily went down to

her bedroom.

She removed her hat and jacket and put them away. Then she stood in the middle of the floor and listened. He had gone into the drawing-room. He had come out into the hall. 'Where is your mistress?' she heard him ask one of the servants.

Then he came upstairs—two steps at a time. He came into the room.

'O Henry !-I didn't know you were return-

ing,' she said brokenly. 'I'—

But he came up to her and kissed her quite in his usual way. 'I suppose not. I hear my telegram never arrived. I sent it by a chance boy, which was rash. My uncle came unexpectedly for a few days, which enabled me to get away.'

He threw himself into an arm-chair. She glanced at him furtively. He looked anxious and

worn.

'Is he better?' she asked in a low voice.

'Yes, slightly. But it has been very terrible. His mind quite gone. No one able to manage him but me.'

'Oh,' cried Millicent, 'how dreadful for you!

How could I'- But she stopped.

'Yes; I did not tell you. I did not want to distress you. It was all so hopeless and so sad. He may last for some while. Something will have to be arranged. I can't be away from the parish much longer.'

He got up and paced up and down the room with knitted brows. Suddenly he paused opposite her. She looked up at him and her heart beat fast. 'You were just going away, were you not?'

he asked.

'Yes. O Henry, can you ever forgive me? I don't deserve it, I know.' She clasped her hands tightly together and her voice choked.

'What do you mean?' asked her husband as he looked at her in a slightly perplexed

manner.

'Why, I was going away to stay away, to—to—leave for some while. I don't know when I was coming back,' she answered feebly, her cheeks

very pale and her eyes full of tears.

He stooped and kissed her. 'Poor darling, you must have been very lonely. I meant to have suggested to you to stay away with some of your friends. Much the best thing to do.'

Millicent stared speechlessly at him. Her quickened perceptions saw things in a curiously broadened light. It gave her something of a shock. She perceived, as with a sudden flash of insight, that Henry could not understand—would

never understand anything so mean and petty and foolish. If she told him all, explained never so eloquently, yet he would not understand. It would not convey to him the truth. He would very likely think she was not quite well, and was not herself to-day. That was all. She felt as if a great gulf yawned between them—between his nature and hers.

'And, by the way,' he went on, 'I picked up a note in the hall for me in your handwriting. Now you can tell me instead—much nicer.'

'Oh, it is nothing,' said Millicent. 'I—I wrote it to tell you I was going away—and—do you

mind giving it to me?'

He threw it into her lap, and then he came near her and stroked her hair. 'We'll go away together for a few days as soon as I can arrange it,' he said. 'You've been doing too much in the parish, I expect. You look quite pale. We'll go and get a breath of sea air.'

'No, I haven't done much at all,' said Milli-

cent miserably.

She watched him wonderingly, as he walked to the window and leaned out, the long sprays of Virginia creeper waving over him in crimson festoons. He was far ahead of her. It was she who had fallen short, who had altogether failed—failed in the most elementary part of the new creed. She could never talk of mutual faith again. She would have to relinquish any such exalted rôle, and recognise that she was merely commonplace. It was very depressing.

'Have you been-into the room yet?' said her

husband presently.

He had given some directions to the gardener who was working below upon one of the flower-

'Yes; just before you came. And—O Henry—I do feel for you—ever so much. It must have been so hard!'

She was not a demonstrative woman, but she came up to him and put an arm around him,

and leant her head against his.

He kissed her in a grateful, tender way. 'Yes,' he said; 'I knew you would. I can't think why I didn't tell you before. But I always put off explaining things—especially about myself. Laziness, I suppose. And besides, I try not to think about it. Regretful thoughts are bad for the work. One mustn't look back. Anyhow, I knew you would understand—and I'm so glad you know. It's all right now.'

There was perfect confidence in his tone. She would always understand, whether he explained himself or whether he didn't—she would understand. That was what was in his tone. She looked at him silently for a moment. Her eyes

'Yes,' she answered in a low voice; 'I think it is all right now.'

THE END.

THE STRANGE STORY OF LADY DUNDEE.



OHN GRAHAM of Claverhouse, Viscount Dundee, fell in the hour of victory at Killiecrankie, 27th July 1689, and his remains were buried in Old Blair church, Blair Athole, where exactly two hundred

years later the Duke of Athole placed a tablet to his memory. The village of Blair in early times was on the hillside adjoining and behind Blair Castle. The present village of Blair Athole lies in the middle of the strath watered by the Garry; its church was the first Presbyterian place of worship attended by the Queen in Scotland. What used to be the old inn, a rambling building in the line of the old coach-road, is now the factor's house. The old church is roofless, and when its dust was disturbed to bury the sixth Duke of Athole in 1866, among the bones disturbed were found some twenty-nine skulls. It appears that when the dust was disturbed at an earlier period, in 1794, some remains of the armour of Claverhouse were found. The gravedigger is reported to have sold these remains to a party of travelling tinkers, who bought them for the sake of the brass which they contained. General Robertson of Lude rescued part of a steel cap from the tinkers, and a portion of Dundee's corslet has been preserved at Blair Castle. Some bones removed in 1852 to the church of St Drostan at Deer, in Aberdeenshire, were believed at the time by not a few persons to have been part of Dundee's bones. But this was strongly disputed, and is not the accepted view.

The following is the text of the memorial placed over the dust of Claverhouse in September 1889: 'Within the vault beneath are interred the remains of John Graham of Claverhouse, Viscount Dundee, who fell at the battle of Killiecrankie, 27th July 1689, aged forty-six. This memorial is placed here by John, seventh Duke of Athole, K.T., 1889.'

Romance and tragedy mingle over the life and death of the Viscountess of Dundee, afterwards Lady Kilsyth. Jean, daughter of William Lord Cochrane, married Claverhouse at the height of his persecuting career, against the will of her mother, in 1684. 'Had she [not] been right principled she would never, in despite of her mother and relations, have made choice of a persecutor, as they call me, wrote Claverhouse. It appears that Lady Dundee's infant boy only survived three months after the fatal news from Killiecrankie. While on a visit to Colzium, the seat of the family of Kilsyth, she met William Livingstone, afterwards Viscount Kilsyth, who became her second husband in 1694. The plain gold ring which he presented to her on the day of their betrothal was dropped in the garden, and this was at once set down as an evil omen. This ring was afterwards discovered, when the tenant was digging potatoes in 1796, nearly a century afterwards. Another ring was found which Lady Dundee may have given her husband, and it bore the inscription, 'Yours till death.' The inscription on the first ring was, 'Yours for ever.' Livingstone had to retire with his wife to Holland for political reasons, and it was there that, in 1695, the following tragic event took place. During the night the turf roof of the house in which they were residing fell and buried the Viscountess and her son, and a Mrs Melville, her lady's-maid. Kilsyth was for threequarters of an hour beneath the rubbish, but both he and his friend escaped unhurt. Not so his wife, who perished along with her maid and son, being suffocated ere they could be relieved. The bodies of mother and son were embalmed and sent to Scotland for burial in Kilsyth church. Exactly a century later, in May 1795, some students from Glasgow went down to visit the Kilsyth vault; and, prompted by curiosity, one of them tore up the lid of the leaden coffin, with the result we have to relate.

Dr Rennie, parish minister, who drew up an account of the circumstance, relates the sequel. He tells us that the body had been embalmed in Holland, landed at Leith, lay for a time in a cellar there until conveyed to Kilsyth, and was buried according to the rites of the Church of England. The body was enclosed first in a coffin of fir; next in one of lead carefully cemented, but without inscription. This was again covered with a strong wooden coffin. The space between the two coffins was filled up with white matter, of the colour and consistency of putty, apparently composed of gums and perfumes, for it had a rich aromatic smell. Dr Rennie had frequently seen the coffin before, as the vault was often opened. The outer wooden coffin and the lead, it was observed, had begun to decay. The students who laid sacrilegious hands upon Lady Dundee's coffinin 1795 had disclosed the inner coffin of fir, which was found as fresh as if newly made; and the cover, being loose, was easily removed. With astonishment visible on their features, they looked on the body of Lady Kilsyth and her child in perfect preservation. On 12th June of that year, the matter having been noised abroad, great crowds came at all hours, and would not be denied admittance to the vault. Dr Rennie, narrating what he saw, says he found the body was in perfect preservation, and quite entire. 'Every feature and every limb was as full-nay, the very shroud was as clean and fresh, and the colours of the ribbons as bright, as the day they were lodged in the tomb. What rendered the scene more striking and truly interesting was, that the body of her son and only child, the natural heir of the title and estates of Kilsyth,

lay at her knees. His features were as composed as if only asleep. His colour was as fresh and his flesh as plump and full as in the perfect glow of health. The smile of infancy and innocence sat on his lips. His shroud was not only entire but perfectly clean, without a particle of dust upon it. He seems to have been only a few months old. The body of Lady Kilsyth was equally well preserved; and at a little distance, with the feeble light of a taper, it would not have been easy to distinguish whether she was dead or alive. The features-nay, the very expression of the countenance-were marked and distinct, and it was only in a certain light that you could distinguish anything like ghastly and agonising traits of a violent death.' A wound still visible on the right temple may have been sufficient to cause the death of Ladv Kilsyth. Some medical gentlemen seem to have gone further than look on, for an incision made into the arm of the infant disclosed the fact that the flesh was quite firm.

At a later date there was vandalism around the tomb of Lady Kilsyth. About 1822 the old

church was pulled down, and a new one built in a different situation. The vault was, however, preserved intact, the factors of Sir A. Edmonstone, the proprietor of Colzium, being buried there. On the death of one of them, about 1851, when the vault was again opened, it was found that the sexton had removed the body of Lady Kilsyth, to put that of the factor in its place. Sir Archibald Edmonstone, who then saw the body of Lady Kilsyth, says that it was perfectly shrivelled and discoloured, and the child, which before had been seen lying at her feet, was now lying on her breast. Impressed by a feeling of reverence for the remains, Sir Archibald immediately ordered the body to be walled up within the vault, so that it could never again be exposed, and he also put a memorial inscription over the spot.

A tragic interest thus attended the last restingplaces of both Viscount and Lady Dundee, though they were laid so far apart. William Livingstone of Kilsyth, who succeeded his brother as fifth Earl of Kilsyth, engaged in the rebellion of 1715, was attainted, and died at Rome in 1733.

AN ANGLO-INDIAN'S RECOLLECTIONS OF THE EDINBURGH MEDICAL SCHOOL

FROM UNDER THE PUNKAH AT TRICHINOPOLY.

IN TWO PARTS.-PART I.



P'S a far cry to Loch Awe,' but not so far as from Trichinopoly to the North Brig o' Auld Reekie; yet here I am sweltering in the former and thinking only of the latter.

I have come back from early parade with the Royal Horse Artillery, had my tub, and find it too hot even to sit idle in a long Madras-chair under a punkah, almost too hot to think, but not quite; and my thoughts have flown back to the North Bridge en route for the University—and I'm thinking—I'm thinking of my medical student days till I determine to try and forget the heat in scribbling.

The time I write of is from the end of the 'fifties till the never-to-be-forgotten graduation day of 1st August 1863. Think of the teachers in the University at that time—gods, not men—Syme, Simpson, Goodsir, Christison, Hughes-Bennett, Playfair, Douglas Maclagan, 'Woody,' Laycock, and the rest—every man among them leaving his mark and making history. How earnest they all were in their teaching, and yet how different! Let me try to sketch some of them. We had better start for a nine o'clock morning class—Materia Medica. Rather sharp work to be in the class-room by nine when you

were regularly reading till two every morning. Poor old Davie Simpson and I generally met about the top of Hanover Street to walk up together to the University; and we had to walk, I can tell you, as we generally looked behind us just before getting on to the Bridge, expecting to see, and seeing, a handsome, tall, slight figure, tightly buttoned up in a black frock-coat, a fine face with grizzled whiskers underneath a wellbrushed hat, a throat open to the breeze in a wide collar, and a pair of shapely legs, well extended, full of spring and life, coming along at something over four miles an hour. You know who it is, of course-Christison. Davie and I never knew quite if he really meant racing us up to the University; but the same thing took place morning after morning, and we had all our work cut out to keep in front of Sir Robert. Nor were we always able to do so; and there was a sly little twinkle in the eye of the Professor on the occasions when he caught us up and sailed past us as we lifted our hats. But the twinkle was all gone a few minutes later when he was seated in his professorial chair, the personification of dignity and the very type of the high-bred physician. Still, I do think there was a twinkle in his eye on the Bridge, and I thought I saw it once on another awful occasion when I was feeling-well,

as I never want to feel again—viz., as I appeared before him for examination. I think he recognised in me one of the youngsters who used so undauntedly to race him up to the University; and if so, he could scarcely have helped twinkling on recognising in the dejected, trembling, pallid youth, sitting lonely before him at the examination-table, the rather boisterous young man, bursting with health and spirit, who had the temerity to try conclusions with him on the North Bridge morning after morning.

HUGHES-BENNETT AND SIR JAMES Y. SIMPSON.

Say that we now go to Hughes-Bennett at ten. Quite a different style of man here-a man that his students feared, while they loved and respected him as one of the grandest teachers and most severe examiners in the University. No nonsense in this class. If any man in the class hopes to pass his examination, he must listen to every word; nay more, he must make use at examination of the very words used in the lecture, in order to give clear definitions. Why, I suppose all of us attending Physiology at that time would to-day define the difference between 'sensation' and 'sensibility' in the very words John Hughes-Bennett used in 1860 - difficult to find any others absolutely correct. What a terrible examiner he was! He looked like stone. He asked you a question, let you talk, and gave not the slightest sign as to whether you were perfeetly right or talking absolute nonsense. I have no doubt this was done to make you self-reliant, but it was agony and so hopeless. I know I left his examination-table with a full conviction that I was plucked and had made unwittingly some terrible exhibition of myself; and the reaction was almost too great for me when, being recalled from the 'funking-room,' where we all had to await our marks being made up, I was told by the Dean of the Faculty that I had passed, and saw on the face of Hughes-Bennett a sort of half-smile, as much as to say, 'What were you afraid of? You were all right; I never said you were wrong; but if he had only favoured me with even a half-shadow of that half-smile at the examination table, what agory he might have saved me! Now I see how right he was; it is no use a man being right if he be not confident in his opinion and self-reliant; and even a student's opinion should not be liable to alteration or modification at the smile or frown of the examiner. What has this severe teacher and examiner done, not only for university teaching in Edinburgh, but also in London, where his system of teaching was carried on by Murchison and others, and to-day is still carried on by those who learned in the old Infirmary wards of John Hughes-Bennett? Once I did see Bennett with a full, broad smile, which, however, he instantly banished, and immediately put on the severe look which he kept for students in general. It came about in this way: Twelve o'clock was the hospital hour, and the students collected in the wards to await the advent of the Professor. A group of us had gathered ourselves at the end of Bennett's first ward, and there was a good deal of laughing and joking going on; there was no very bad case in this ward, and the patients were mostly sitting up in bed, amused with the fun going on amongst the students. I was always more or less an adept at getting musical sounds out of the most unlikely things, and on this occasion I was in full blast upon my stethoscope, playing 'Home, Sweet Home' with much feeling and tremolo, as if the stethoscope were a cornet, greatly to the edification of the students and patients, when suddenly in walked Bennett with his quick step and caught me in flagrante delicto. The solo could scarcely have recommended itself to his highlycultivated musical ear, but the ridiculous situation did catch him for a second, and caused a distinct smile, hidden, however, immediately under the usual severe look. I wished I could have sunk through the floor, but nothing was said; and in five minutes more I was examining a new case before Bennett and all the students, beginning with the inevitable first two questions, 'How long have you been ill?' 'Where do you feel pain?' and without these two preliminary questions no student of Hughes-Bennett was allowed

However, that story has taken us to the Infirmary at twelve o'clock, and I have not accounted for the hour from eleven to twelve. Let us go to the great Professor J. Y. Simpson, afterwards Sir James.

Well, this is a class in which you really require two full sessions to get through the work properly. The first session should be devoted to copying all these closely-written blackboards into your note-book. There is very little time to listen to the lecture; you must get the boards this session and listen to the lecture next winter. I suppose there is hardly a student who attended Simpson's lectures who has not his copy of these blackboards treasured to this day. I know I have mine, and would not take their weight in gold for them. What a delight they have been to me in almost all parts of the world! I knew them by heart at one time, if indeed I do not do so now. A crowded class to-day—possibly a 'Simpson story' is expected. The little door opens, and in walks the dear old Professor, with his massive head, his long hair, his twinkling eyes, and broad, benevolent face. Then he begins to speak in his rather small voice through smiling lips; he rests both hands upon a long pointer, and his head rests a little sideways upon his hands. Is it possible this little, stout, goodhumoured - looking man is the great Simpson, at whose feet the medical world has learnt its lessons; the man who perhaps has done more for humanity in general than any other before or since, by giving freely that blessed drug chloroform, with its power to relieve suffering? Think of it! Think what it was in years before Simpson and chloroform. Think of the operations in hospitals, on the battlefields, in the cockpits on board our ships in action, when these operations were performed without chloroform.

Well, there stands the little man, or great god, who brought to mankind the greatest blessing of the age—chloroform. What a combination of qualities in one man!—kindliness, charity, perseverance, intellect, devoutness, skill, grand common-sense, gentleness, courage, and, I think, every other great quality of mind that one can think of, keenly alive to a joke, and with a very pretty turn of sarcasm.

Will you excuse another story, and that a personal one? At the time I write of a system existed with regard to the examinations-I do not say whether it was good or bad, but if a student at the written examination did an exceptionally good paper he was excused his viva voce exam., and this was equivalent to passing with honours. I have before said I knew Simpson's blackboards by heart, and as they contained the whole of Simpson's subject, it was not difficult for me to give in a good paper. The real difficulty was to know where to stop. Well, I had been told from a private source I was to have no viva voce, but I was not supposed to know this till I went into the examination-room.

When I took my seat at the examination-table Simpson had not arrived, but one of the assessors, by no means a friend of mine from private reasons, had arrived, and began to examine and 'heckle' me. I knew he was doing this 'unlawfully,' having previously been told I was to have no vivá voce; but knowing Simpson's boards so well, I was not to be frightened by this Jack-in-office, and I dare say gave him as good as I got. Presently in walked Simpson, with his broad-brimmed hat and long hair flowing out. I saw him take in the situation in an instant as I jumped up from my chair and stood respectfully at attention. The Jack-in-office, finding himself caught doing a dirty trick, made a lame apology, saying, 'Oh, this is Mr Rowe, Professor; I am just asking him a few questions, but it is very easy work. Would you like to examine him?' Dear old Simpson, taking off his hat and pushing back his hair, with a wicked little twinkle in his eye to me, said, 'Oh no; Mr Rowe is far too good for me,' with a very distinct accent on the 'me,' as much as to say, 'and I fancy a great deal too good for you.' The Professor then sat down, and motioning me to my chair opposite him, said, 'Mr Rowe, you gave me an excellent paper, and I am much pleased with your thesis on chloroform which I am reading. How is your father? Has he been catching any more salmon lately?' The rest of the time we spent in talking of salmonfishing, and Jack-in-office, I fancy, felt rather 'out of it.'

Such was the kindly man who conferred on mankind the inestimable boon of chloroform, with its power to give freedom from pain and suffering even during the most prolonged and severe operations. To-day, when you cannot take up a medical paper without finding a record of two or three deaths during the preceding week from chloroform, it is almost becoming a question if the boon is as great as it appeared. We did not have these deaths in the old days. How can we explain all this? In my time at Edinburgh every one got chloroform, and almost any quantity. We hardly ever used a stethoscope to examine the heart, or felt the pulse, and the patients did not die. One thing we certainly never didwe never used an inhaler; and I suppose to this day in Scotland and Ireland 'inhalers' are almost unknown. Imagine, if you can, the expression on the face of Simpson or Syme if any London body' had proposed giving a patient of theirs chloroform through an inhaler! Both Simpson and Syme taught that chloroform should be inhaled from being sprinkled on a towel, the two golden rules being to see that the vapour was properly diluted by the surrounding air, and to watch the breathing, holding the towel some inches from the face. It may be a coincidence merely; but if so, it is remarkably strange that, while the chloroform has not changed, while the constitutions of the patients have not changed, where the use of an inhaler is the rule there are frequent deaths from chloroform; whilst in Scotland and Ireland, where the use of an inhaler is the exception, deaths are proportionately rare.

THE NIGHTINGALE'S SONG.

I WANDER musing 'neath the trees,
Watch'd by the queen-moon's tender eye,
And there comes floating on the breeze
A rich and wondrous melody.

Now joyous as a marriage song,

Now mournful as a funeral wail,

It rings through the hush'd night-hours long—

The passion of the Nightingale.

Upward it floats, now sinks again, Low, like a dying man's last word; Anon the mingled joy and pain Rises from the full-throated bird.

O night, how beautiful thou art!

Dark-arched above, around the glow

Of Dian; in my musing heart

The song of Nightingale below.

WILLIAM COWAN.



THE CHUSAN ISLANDS.



HE beginning of 1840 saw affairs in the Near and Far East very much what they are just now. We had recently succeeded in suppressing sedition at Kurnool; we had an army in Afghanistan; the Indian

press was teeming with accounts of the unsettled state of our N.W. frontier, then the kingdoms of the Sikhs and Nepalese; a body of Russians was advancing on Bokhara with the ostensible purport of releasing some Russian slaves confined there; and affairs in China were beginning to assume a threatening aspect.

In China and the Far East matters progressed so rapidly that in early May five men-of-war and several transports were anchored, as a first instalment, in the capacious harbour of the appointed rendezvous for the necessary expedition, Singapore, which we purchased from a native chief in 1819 for sixty thousand dollars, at which time it boasted only one hundred and fifty inhabitants. By the 30th May numerous other vessels having arrived, the signal was given for all to weigh anchor for the Canton River, opposite the mouth of which they were all riding by midday of 23d June.

Life on a sailing transport was very different sixty years ago from what it is now on a fine steamer. Ex uno disce omnes. On board the John Adams, from Madras, of only four hundred and ninety tons, four hundred and twenty men were packed like African slaves, five officers (one a relation of the writer) being stowed away on the lower deck with their men, in a small aft cabin recently used as a store for ghee, tobacco, and other savoury substances provided for the native crew. It required no less than five vessels to carry one regiment, the 49th, and four to convey the 26th. In calm weather the officers in one ship would row over, and dine with those on another as they were sailing along; while as to navigation in those dangerous and but little-known waters, many of the transports were unprovided with charts; and this naturally often proved exceed-No. 17.—Vol. I.

ingly awkward when they got separated from the rest of the flotilla.

After a couple of days' ride in a very unsafe anchorage opposite the Canton River, during which dragging of anchors and consequent collisions were frequent, a boat from H.M.S. Algerine, a ten-gun brig, was sent round ordering the squadron to proceed to Chusan. By Sunday, 5th July, the whole force was assembled before the suburb of the principal island, which fell into our hands without the land forces discharging a musket, a few round-shot from the men-of-war sufficing to drive the Chinese out of two apologies for batteries, and to scatter them in all directions. Behind the suburb was a five hundred yards stretch of low swampy ground given over to the cultivation of rice, in rear of which lay the city, surrounded, like every other in that country, by a high wall. To scale this wall all was in readiness by next daybreak; but, to the great disappointment of the force, the city was found to have been deserted during the night. Unfortunately an immense supply of sham-shoo, a highly-intoxicating liquor, was found in the various houses, and the scene of drunkenness and pillage that ensued was awful. In one regiment alone over three hundred men were rendered incapable, and it was found necessary to re-embark the whole battalion; but there was one notable exception in the 26th Cameronians, who conducted themselves in every respect with the greatest sobriety. So serious was the general debauch that the inhabitants reported to the emperor that the sure way to conquer the barbarians was to place liquor in their way. The city is backed by a range of hills intersected with valleys, but is too far from the harbour, so that our men had to encamp on low marshy ground, which swarmed with mosquitoes, and produced a great deal of diarrhoea and sickness. The first to succumb was General Oglander, a fine old warrior belonging to the 26th, who had been on many a hard-fought field.

ided with One of this group of islands, named Potoy or d exceed- 'The Worshipping Island,' a bare, rocky spot [All Rights Reserved.] MARCH 26, 1898.

measuring some four by two and a half miles, is worthy of mention. Its inhabitants are all priests, with the exception of a few labourers who cultivate vegetables and rear poultry for them, as they are not permitted to eat meat; nor are any females allowed on the island. The temples, which are built in the midst of the few trees here and there, are some of them very spacious and handsome structures, adorned with gods and goddesses of grotesque forms. Some of the religious rites and usages have points of resemblance to those of the Catholic Church, as has been elsewhere noted in Buddhist regions. The priests are shaved, and clad in long, flowing yellow robes, while the devotees prostrate themselves before images, throwing up incense, and counting their prayers on beads. These temples or jhoshouses are supported by the government and by the donations of those who go to worship. Large junks on passing usually put in to ask whether or no their voyage will be propitious. The priest gives the inquirer some pieces of stick marked with cabalistic signs which he has to shake about in his hands until one falls out, the symbol on which no doubt admits of interpretation according to the amount of sycee silver deposited.

On 28th September, after an absence of two months from Chusan, Admiral Elliot, who was in supreme command of the expedition, returned from the Gulf of Pe-chi-li, where he had gone to treat with the Chinese authorities, his demands including the permanent cession of an island to England and the opening of all ports to British trade; to the former of which they readily agreed, but to the latter raised strong objection. A truce was proclaimed for consideration of these terms; and most opportunely for the health of the troops, which was just then appalling, not onehalf of the three thousand three hundred and fifty-three, who in July landed in perfect health, being fit for duty. The Cameronians had five hundred and sixty men in hospital, and every regiment was losing two or three daily. The truce induced the natives to return to the city in considerable numbers, and to open shops for the sale of meat, fish, poultry, vegetables, and fruit; they had been forbidden by the mandarins previously to traffic in any way with the barbarians, or to supply them with food under pain of death. Amongst other things they set up a Punch and Judy show, an exact counterpart of that exhibited in England, even to the tone of Punch's voice, insomuch as to suggest that we may have derived this form of entertainment from China.

Unfortunately at this juncture the armed transport Kite struck on a quicksand in the Yang-tsekiang River and capsized, the master, Captain Noble, being jerked overboard and drowned, and his wife, after being tossed about in an open boat with some others for three days and nights, was picked up by the Chinese and taken as a hostage to Ningpo. On application being made for the

unfortunate woman's release, a 'chop' was sent back that they would give up no one until we gave up Chusan, and that unless we did so immediately she, together with the other prisoners, would be carried down to Canton. Amongst them was Lieutenant Anstruther of the artillery, who had been kidnapped some time before while making a survey of the islands. All were, however, being well treated and allowed to communicate with their friends, as well as to receive clothes, books, cigars, &c., sent to them.

Not until the following February, 1841, was it notified to the force that Hongkong was the island to be ceded and that Chusan was to be given up, after an occupation of seven dreary months, which had cost us the lives of nearly a thousand gallant fellows, more than a quarter of the whole land-force engaged. Some engineer officers were at once sent down to Hongkong to commence the erection of barracks; but it appeared that, after all, the treaty had not been signed, the emperor having disavowed the acts of his agents, and that it was only a ruse of the heathen Chinee to get us away from Chusan, which unfortunately succeeded. They, however, kept faith in restoring all prisoners, as promised.

During March and April the Chinese began to be so troublesome that it was found necessary to despatch to Canton a large force, which, on the 25th of the latter month, took possession of the heights north of that city. Our force landed was two thousand against ninety thousand, our loss one hundred and five killed and wounded; that of the enemy fifteen hundred. We remained on the heights till the 30th, when the inhabitants paid six million dollars in order that their city might be spared, in addition to three lakhs of dollars for injury done to the British factories, and ten thousand for ill-treatment of the crew of a small vessel, the Black Joke. In fact, they were willing in those days to pay any sum rather than cede an inch of territory.

This severe lesson was soon forgotten, as on 21st August another expedition was essentialnorthward this time to Amoy, which was captured without much loss or difficulty. In a pool by the side of one of the principal streets were found numerous dead bodies of female infants tied up in mats, confirming the report that the Chinese frequently destroy their female children. The force then went on to attack Chinhai (Shanghai) and Ningpo, and to retake Chusan, which was found to have been strongly fortified since our departure, one hundred and thirty-six guns, thirtysix of which were brass, having been mounted on the works thrown up. On 1st October the transports were again discharging their cargo of troops, by two P.M. of which day this now all-important group of islands was in our hands.

By the 10th Chinhai (Shanghai) had fallen, and by the 13th Ningpo, so we were now in a position to dictate almost any terms. In Ningpo was found an enormous store of grain, which the appointed prize-agents sold to the natives at a dollar for as much as a man could carry away. And here again the wilv Chinee proved his cunning by passing, in two days, some two thousand copper dollars. The chief amusement during the occupation was watching the natives catch fish with the aid of cormorants. Each boat contained from eight to ten birds, which, at a given signal, all jumped into the water and commenced diving. On their coming to the surface again the boatmen hooked them up by a string which was attached to their necks and made them disgorge any fish they had caught. They were then tossed again into the water, any bird that did not do his work well and that was not constantly diving being struck with a long bamboo till he recommenced.

On 24th August a conference was held at Nanking between Sir Henry Pottinger and the governor of that city to decide upon the terms of peace. The following terms were duly ratified by the Chinese commissioners: (1) A cash payment of twenty-one million dollars; (2) permanent cession of the island of Hongkong; (3) permission

to trade with and have a consul at Canton, Amoy, Foochoofoo, Chusan, Ningpo, and Shanghai—upon the whole, a gratifying conclusion to a tedious war of nearly three years' duration, giving just cause for pride that we had so completely humbled the Celestial government, which but two months previously could think and boast of nothing but utterly exterminating the white-faced barbarians by driving them into the sea. The result strengthened a Chinese superstition of very ancient date that their country would one day be subdued by a woman from the West.

On 21st September news was received of the formal signature by the emperor to the treaty, and on 20th December forty transports sailed westward from Hongkong. A garrison was left in Chusan until the whole indemnity was paid, when it was withdrawn in 1846. We thus twice surrendered this group of islands, a position that would have played a highly important part in the world to-day, and which, had we retained, might have given an entirely different complexion to the present state of affairs in the Far East, even if it had not prevented it altogether.

JOHN BURNET OF BARNS.

CHAPTER XX .- THE HOUSE OF DAWYCK.



KNEW well that I had little time to lose, and that what must be done must be done quickly. So, as soon as the tails of them were round the hillside, I came out from my hiding-place and mounted

Maisie once more. I thanked Joshua Watson, the landlord; and, with a cry that I would remember him if I ever got my affairs righted again, I turned sharply through the burn and down the path to Peebles. It was touch or miss with me; for it was unlikely that the highway between the West Country and the vale of Peebles would be freed from the military.

Yet freed it was. It may have been that the folk of Tweedside were little caring about any religion, and most unlike the dour carles of the Westlands; or it may have been that they were not yet stirring. At any rate I passed unmolested. I struck straight for the ridge of Dreva, and, rounding it, faced the long valley of the Tweed, with Rachan woods and Drummelzier haughs and the level lands of Stobo. Far down lay the forest of Dawyck, black as ink, on the steep hillside. Down by the Tweed I rode, picking my way very carefully among the marshes, and guarding the deep black moss-holes which yawned in the meadows. Here daybreak came upon us, the first early gleam of light tingling in the east and changing the lucent darkness of the moonlit night to a shadowy gray sunrise. Scrape raised his bald forehead above me, and down the glen I had a glimpse of the jagged peaks of the Shielgreen Kips, showing sharp against the red dawn. In a little I was at the avenue of Dawyck, and rode up the greensward, eager to see my love.

The house was dead as a stone wall, and no signs of life came from within. But above me a lattice was opened to catch the morning air. I leaped to the ground and led Maisie round to the stables which I knew so well. The place was deserted; no serving-man was about; the stalls looked as if they had been empty for ages. A great fear took my heart. Marjory might be gone, taken I knew not whither. I fled as though the fiend were behind me to the door, and knocked clamorously for admittance. Far off in the house, as it were miles away, I heard footsteps and the opening of doors. They came nearer, and the great house-door was opened cautiously as far as possible without undoing the chain; and from within a thin, piping voice inquired my name and purpose.

I knew the voice for the oldest serving-man who dwelt in the house.

'Open, you fool; open,' I cried. 'Do you not know me, the Laird of Barns?'

The chain was unlocked by a tremulous hand. 'Maister John, Maister John,' cried the old man all but weeping. 'Is't yoursel' at last? We've had sair, sair need o' ye. Eh, but she'll be blithe to see ye!'

'Is your mistress well?' I cried with a great

'Weel eneuch, the puir lass, but sair troubled in mind. But that'll a' be by and dune wi', noo that ye're come back.'

'Where is she? Quick, tell me,' I asked in my impatience.

'In the oak room i' the lang passage,' he says as quick as he could muster breath.

I knew the place, and without more words I set off across the hall, running and labouring hard to keep my heart from bursting. Now at last I should see the dear lass whom I had left. There was the door, a little ajar, and the light of a sunbeam slanting athwart it.

I knocked feebly, for my excitement was great. 'Come,' said that voice which I loved best in all the world.

I entered, and there at the far end of the room in the old chair in which her father had always sat, wearing the dark dress of velvet which became her best, and with a great book in her lap, was Marjory.

She sprang up at my entrance, and with a low cry of joy ran to meet me. I took a step and had her in my arms. My heart was beating in a mighty tumult of joy, and when once my love's head lay on my shoulder I cared not a fig for all the ills in the world. I cannot tell of that meeting; even now my heart grows warm at the thought; but if such moments be given to many men there is little to complain of in life.

'Oh John,' she cried, 'I knew you would come. I guessed that every footstep was yours, coming to help us. For, oh! there have been such terrible times since you went away—how terrible I cannot tell you,' and her eyes filled with tears as she looked in mine.

So we sat down by the low window, holding each other's hands, thinking scarce anything save the joy of the other's presence. The primroses were starring the grass without, and the blossom coming thick and fast on the cherry-trees. So glad a world it was that it seemed as if all were vanity save a dwelling like the Lotophagi in a paradise of idleness.

But I quickly roused myself. It was no time for making love when the enemy were even now at the gates.

'Marjory, lass,' I said, 'tell me all that has been done since I went away.'

And she told me—and a pitiful tale it was—that which I had heard from Nicol, but more tragic and sad. I heard of her brother's ruin—how the brave, generous gentleman, with a head no better than a weathercock, had gone down the stages to besotted infamy. I heard of Gilbert's masterful knavery, of his wooing at Dawyck, and how he had despoiled the house of Barns. It seemed that he had spent days at Dawyck in the company of Michael Veitch, putting my poor Marjory to such a persecution that I could scarce

bide still at the hearing of it. He would importune her night and day, now by gallantry and now by threats. Then he would seek to win her favour by acts of daring, such as he well knew how to do. But mostly he trusted to the influence of her brother, who was his aider and abettor in all things. I marvelled how a gentleman of family could ever sink so low as to be the servant of such cowardice. But so it was, and my heart was sore for all the toils which the poor girl had endured in that great desolate house, with no certain hope for the future. She durst not write a letter, for she was spied on so closely by her tormentors; and if she had bade me return they well knew I would come with the greatest speed, and so, in knowing the time of my arrival, would lay hands on me without trouble. The letter which reached me was sealed under her brother's eyes, and the postscript was added with the greatest pains, and sent by Tam Todd, who sat at Barns in wrath and impotence. Truly, things had gone wrong with a hearty goodwill since I had ridden away.

But the matter did not seem much better now that I had returned. I was an outlawed man, with no dwelling and scarce any friends, since the men of my own house were either hostile or powerless to aid. My estates were a prey to my enemies; I had nought to trust to save my own good fortune and a tolerably ready sword; and, to crown all, my love was in the direst danger. If she abode at Dawyck the bitter persecution must be renewed, and that the poor maid should suffer this was more than I could endure. I had no fear of her faithfulness, for I knew of old her steadfast heart and brave spirit; but I feared my cousin as I feared no other on earth. He cared not a fig for the scruples of ordinary men, and he was possessed of a most devilish cunning, before which I felt powerless as a babe. Yet I doubtless wronged him by suspicion, for after all he was a Burnet, and fought openly as a man of honour should. But he had a gang of marauding ruffians at his heels, and God alone knew what might happen.

At all events I must wait till what time my servant Nicol should arrive from Leith. I had no fear of his failing, for he had the readiest wit that ever man had, and—I verily believe—the longest legs. He should be at Dawyck ere noonday, when he should advise me as to my course. Nor was there any immediate danger pressing, for so long as Gilbert abode at Leith he could not come to Dawyck; and unless our schemes grievously miscarried, he could not yet have been apprised of my escape. Moreover, the soldiers, to whom I had given the slip the night before, could as yet have no inkling either of my identity or my present harbour. So for the meantime I was safe to meditate on the future.

Marjory—woman-like—was assured that now I had come back her sorrows were at an end. She would hear nothing of danger to be. 'Now that

you are here, John,' she would say, 'I am afraid of nothing. I do not care if Gilbert return and plague me a thousandfold more; I shall well support it if I know that you are in the land. It is for you I fear, for what must you do save go to the hills and hide like the hillmen in caves and peatbogs? It is surely a sad use for your learning, sir.'

So the morning passed so quickly that I scarce knew it. We went together to a little turretroom, facing the north and fronting the broad avenue, which all must pass who come to the house; and here we waited for the coming of Nicol

About twelve of the clock we saw a long figure slinking up the avenue, keeping well in the shade of the trees, and looking warily on all sides. I knew my man, and going down to the door I set

it open and waited for his coming. Nor did I wait long. When he saw me he changed his walk for a trot, and came up breathing hard like a hound which has had a long run. I led him into the dining-hall, and Marjory prepared for him food and drink. Never a word spoke he till he had satisfied his hunger. Then he pushed back his chair, and, looking sadly at my lady, shook his head as though in dire confusion.

'A bonny bigging, Maister John,' he said; 'but ye'll sune hae to leave it.'

'That's a matter on which I have waited for your coming,' said I; 'but I would hear how you fared since I left you.'

'I've nae guid news,' he said sadly; 'but such as they are, ye maun e'en hear them.'

And this was the tale he told.

(To be continued.)

AN ANGLO-INDIAN'S RECOLLECTIONS OF THE EDINBURGH MEDICAL SCHOOL

FROM UNDER THE PUNKAH AT TRICHINOPOLY.

IN TWO PARTS.—PART II.



UT let us get back to the Professor. 'Simpson's' being over: it is twelve o'clock and hospital hour, and off stream the students across from the University buildings, away down Infirmary Street to the old

Royal Infirmary. Well, we must next go and hear one of the greatest surgeons of modern times:

PROFESSOR SYME.

Professor James Syme - a name to conjure with, a teacher to the world at large; a giant mind in a comparatively small body. I am a dresser in Syme's wards, so await the arrival of the great man along with his house surgeon and others at the foot of the stairs. Presently we see a high yellow carriage on C-springs, with blue hammercloths and a pair of large handsome gray horses, drive up to the door. The house surgeon advances to meet his chief, Syme descends from his carriage, and all hats are raised as this veritable king enters, walks up the stairs talking to his house surgeon, and enters his private room. He takes off his overcoat, and there stands the small figure so well known to thousands. He wears an ordinary black evening coat and waistcoat showing a white shirt-front, and round his neck a cravat (not a tie) of white and blue The trousers are a grayish tweed mixture, such as to-day we call a 'Bliss' tweed and make our riding breeches of. Very small hands and feet, no moustache or beard, but small side-whiskers. A high intellectual forehead, sharp observant eyes, rather a large mouth, and a strong chin. Vigour and determination are, I think, the two qualities that strike one most. After a few words, and perhaps seeing some particular patient in the private room, we all file downstairs to the operating theatre, headed by Syme and his house surgeon.

In this theatre Syme gives his clinical lectures, and here also on other days performs the major operations before hundreds of students and medical men from all parts of the world who have come to see the man with a world-wide reputation operate. But to-day is a lecture day, and the lecture will refer to many subjects all illustrated by cases from the wards, and any surgical treatment of an operative character will be carried out there and then. Do not suppose that the patients object to this; on the contrary, they like it, and accept the presence of all these doctors and hundreds of students as the highest guarantee that they will meet only with the most skilful and most correct treatment. There is a slight applause as Syme enters, and he courteously motions foreign visitors and strangers to those seats of honour within the rail which separates the students' benches from the space reserved for the operations. Then Syme sits down in his chair and runs his hand over his face, finishing by stroking down his cheeks, the fingers running over the left cheek while the thumb smooths down the right. All who had the honour of knowing Syme will know exactly what I mean, while to those unfortunates who did not know him it does not signify whether or not they catch the idea. He begins in not too clear a voice, 'Gentlemen,

the case to which I wish to draw your attention first to-day is,' &c. Then, as he goes on lecturing, he leans forward, a hand leaning on each leg, the body is allowed to sway backwards and forwards, and the hands slip up and down the thighs as the body sways. Having described the case and informed the class what he proposes to do in the way of treatment, he looks to his house surgeon, who is seated near him and on the alert, asks him to bring in the case, and the patient enters, walking or being carried in a basket-litter, according to circumstances. The chloroform is given, Syme stands by the table, buttons his coat across his shirt-front, turns up two inches of coat-sleeve, and proceeds coolly and deliberately to his operation. This finished, the patient is removed, the nurses and dressers quickly and quietly arrange everything, and Syme, again seated, says, 'The next case, gentlemen, is so and so,' and, as in the first case, so in this and perhaps four or five more, the students have the advantage of having the case lectured on and treated before their eyes. The hour being finished, Syme rises, makes an abrupt little bow to his students, and leaves the theatre, perchance talking to some great French, German, Italian, or other foreign surgeon who has introduced himself to Syme.

On big operation-days the theatre was crowded to repletion; not only a large part of the seventeen hundred students at the University being there, but surgeons of the army and navy, the junior surgeons on the staff of the Royal Infirmary, and foreign surgeons from all parts of the world.

Syme hated to be timed over an operation. I recollect on one occasion, when he had to undertake an unusually bold operation (no one who saw it has forgotten the case of Gluteal Aneurism), an elderly surgeon from abroad occupied one of the reserved seats of honour, and just as Syme began his operation amid a death-like silence this visitor pulled out his watch. Syme looked at him and then went on with more than usual deliberation. The operation was a tremendous one, and most startling, as every one in the theatre knew there would be a critical instant when the life of the patient depended on the boldness, coolness, and skill of the operator - an operation requiring nerves of steel, the quickness of a flash of lightning, and the coolness and dexterity of a Syme. Every one held his breath and looked nervous except the operator. The moment came, was past; the patient was safe, and Syme had succeeded. You could hear the hundreds in that theatre draw a long breath of relief. The patient was sleeping away quietly, and the great man deliberately finished the concluding details of his operation. The patient was carried out of the theatre in the basket-bed. Not a word had been spoken all this time, not a whisper amongst all those onlookers; but as the green-baize door closed behind the dressers carrying out the patient there was a burst of applause from the crowded benches. Syme

immediately suppressed this, and then said a few words about the case, finishing thus: 'One thing more, gentlemen, I wish to say. I know it is frequently the custom to time an operator over an operation. Now, if the operator were a young man, or inexperienced, nothing would be more likely to upset him at the commencement of an operation than to see some one pull out his watch for this purpose. In these days of chloroform nothing is gained by trying to do an operation quickly, the great thing is to do it well.' Then came the abrupt little bow, and every one began to leave the theatre, our distinguished visitor who pulled out his watch, very red in the face and dreadfully crestfallen, amongst them.

Syme, however, objected to these big crushes at big operations, and at his next clinical lecture said: 'Gentlemen, it is not at operations such as took place last Wednesday that I wish to see every student present—you will probably go through your whole life and never have to undertake such an operation; what I wish you to come and see are everyday operations such as you yourselves

will meet with in general practice.'

Through the kindness of Syme I made my start in life. I had been officiating as house surgeon in London, and at the end of my time I was at a loss to know what to do. Timidly, one day in my house surgeon's quarters in London, I sat down and wrote to Syme asking him if he would kindly give me a certificate saying I had been a dresser in his wards. The answer arrived by return of post, but was almost illegible in its cramped, small writing. When-after spending hours over the letter, deciphering it to the best of my ability-I had written down word by word what I believed to be the contents, they were so wildly improbable and far above what I had expected that I could scarcely believe I had translated the curious hieroglyphics aright. What I made out was the following:

'DEAR DR ROWE,—Before replying to your letter of the 10th, I wish to ask whether you feel inclined to go abroad with a party of young noblemen, one of whom is slightly an invalid.—Yours truly,

JAS. SYME.'

Cannot you imagine the delight and surprise of a young M.D. who did not know where to look for his next guinea at receiving such a letter from such a man. I had been fortunate in my examination paper with Syme as well as Simpson, and on going to Syme's table for my vivà voce, he advanced from before the fireplace, where he was standing with his coat-tails under his arms, and all he said to me was: 'I've got nothing to say to you,' meaning I had passed on my paper, and I knew why. A few days before the examination I noticed at three clinical lectures he brought in the same sort of case, and the remarks on its treatment were not more than a dozen

words altogether, finishing up on each occasion with a pithy last three words. I felt certain it was to be a question for examination, and had his very words down in my note-book. To my intense delight, in my first eager, anxious glance over the surgery examination paper, there was the question, forming one of five or six others. My answer was in his own words, and occupied exactly one line and a half of my paper. I believe it was this tickled the fancy of the great Syme, who passed me, and eventually sent me travelling with Sir Newman Macdonald, Lord Oldport, and Mr Page all through France, Italy, Sicily, Gibraltar, Malta, Egypt, up the Nile, Palestine, Turkey, Austria, Prussia, Germany, Belgium, &c.

Syme died I think in 1870, but his name can never be forgotten as one of the greatest pioneers in surgery.

PROFESSOR JOHN GOODSIR.

At two o'clock Professor John Goodsir gave his lecture on Anatomy. Here again a man with a world-wide reputation as the very greatest of anatomists. A large man in every way; no littleness of any sort, large of heart, of head, and of limb. A kindly face, with whiskers, beard, and moustache, which he has a habit of stroking down with a large hand. I should say at least six feet one in height, somewhat bent and slightly paraplegic, making the gait awkward and uncertain. Profound and enthusiastic in his subject, almost too profound for junior students, with a reverence for his study that seemed to raise it above an ordinary subject to be lectured on for the instruction of students at a university.

See him as he enters his class-room and receives a loving little welcome from these crowded benches. I think he scarcely hears it; he is far away, thinking deeply over what he has just had to drag himself from in his own private room, or the museum, or of what is going to occupy him during the next hour. Goodsir disapproved entirely of any short-cuts to knowledge, especially anatomy, and thought the more stony the path was the more was the goal worth reaching. I recollect when that really admirable book *Gray's Anatomy* came out, Goodsir condemned it because 'it made anatomy too easy!' Ye gods! I do not think that even with our Gray the students ever found anatomy too easy. The Professor wished us only to use Quain's Anatomy at home and Ellis in the dissecting - room. Yes, one must confess that Goodsir's lectures were just a little too profound for junior students; and had it not been for his staff of demonstrators in the dissecting - room, Turner, Cleland, and Wilson, as also for that most popular class—the anatomical demonstrations given at four o'clock by Mr Turner (now Sir William and Professor), I fear we should have cut a sorry figure in trying to answer the questions of the Professor, made all the more puzzling in the endeavour of this profound mind to make them appear simple. But no professor in the University had a tighter hold on the affections and respect of the hundreds of his students. Such a large class as the anatomy one was an awkward one to interest and keep perfectly in order; containing, as it did, reading men, idle men, funny men, &c., it did not take much to upset the nice balance required to keep them all quiet, and there was a tendency to rounds of applause on short notice. Once, I recollect, Goodsir was having quite a field-day, although I am not sure that the students were enjoying it as much as the Professor. He was lecturing on the ethmoid bone, and had all the most delicate bones of the face and skull on a tray on his lecture table-bones so delicate, many of them, let me tell the lay reader, that some of the plates of these bones are hardly thicker than, and are as delicate as, a butterfly's wing, processes and joints that might be damaged even with the most careful handling. I don't know if handling these dearly-loved delicate specimens attracted too much attention of dear old Goodsir, but he made some awkward step with his paralytic foot, stumbled, caught at the table, upset the tray and specimens, and, worst of all, fell with a crash on the floor. The students behaved admirably, not a sound, not a movement, not a word. In this silence our Professor awkwardly gathered his long limbs together, picked up all his specimens, carefully running his eye over each; and when at length he had them all back on the tray, and had smoothed his hand over his face and beard, he gave out these words, which I shall never forget: 'Not a bone broken, gentlemen'—with that the strain on the students was loosed, and there was a loving round after round of applause. The oracular speech, 'Not a bone broken, gentlemen,' conveyed such a lot, which it would spoil the speech to analyse; but so long as the students were assured that the individual bones of their dear Professor were all right, they cared little about the specimens, and would have been glad, indeed, if there had not been another ethmoid or sphenoid bone left in the world for examination purposes.

In connection with the Chair of Anatomy in the University another great man held sway. Every one knows that black velvet skull-cap and those gray whiskers and keen eyes—yes, 'John Arthur' of course; and I do not feel sure to this day whether he was assistant-professor, or Goodsir's man, or what; at any rate he was a power, and it was much better to have John Arthur for a friend than an enemy. He certainly collected the cards at the lecture-room door, he injected all the bodies for the rooms upstairs, and performed many very small offices about the class-room; but then if you came upon him in the museum he was quite equal to giving you a lecture on anatomy that made you wish you knew half as

in Highland families of that generation, before the commercial spirit ate like a canker at its roots.

'But consider, Jessie,' she said, 'you can easily get another place. People will only be too glad to get such a good servant as you. You had better think over the matter before you decide.'

'Deed, it's not thinking any more about it I'll be,' replied Jessie. 'Me that's been in the family twenty-five years too. It's only proud I'll be to stay with you as long as you'll hev me.'

But you know—I must sell the house and the furniture'—another twitch of the lips—'and leave Herrington, and go away among strangers, and—and, oh! it's ruined I am, Jessie.'

She broke down. But the cry did her good.

A pair of warm arms were around Miss Crissie, and a soothing voice said:

'Don't cry like that, m'euduil (a term of endearment). It's myself that'll work for you all my life. And it's very cluvver I am with my needle and such like. And if anybody will be wanting to know why you will be leaving Herrington, I'll be mekkin' that right.'

And so it was settled that Jessie should stay.

Soon the sale of the house and furniture was announced, and the curious were speculating as to the cause. But Jessie was equal to the occasion.

'Are you going to the roup?' she asked Ishbel Macdonald, who, she well knew, would carry her words far and near. 'It'll be a fine roup, I'm thinking. But of course Miss Crissie won't be caring much for the money it'll bring her. 'Deed, it's strange to me why she has stopped in Herrington so long when she has a fine big house in London to go to. And it's you that would open your eyes, Ishbel, if you was only to see the kerrages and the horses and the servants in grand clothes to wait on her.'

'And will she ride in a kerrage now?' asked Ishbel admiringly.

'Deed, that she will—kerrages with two horses and a coachman with a lum hat' ('And the fare one penny,' she added to herself).

'And will her house be as big as John the Banker's?' inquired the awe-stricken Ishbel.

'John the Banker's!' laughed Jessie derisively.
'Hoch, now, how simple you are! I'll no' be saying that the kitchen is chust as big as the whole of John the Banker's put together—no, I'll no' be saying that—but that house would chust mek a fine porter's lodge for Miss Crissie's house, I'm thinking.'

'And you'll be going away with Miss Crissie, I suppose?

'Of coorse; it's me that'll only be too glad to leave Herrington when it's my fortune I'll be mekkin' in London.'

'Ah, well,' rejoined Ishbel with a sigh, 'it's me that'll be sorry to see the back o' the mistress; for it's a good leddy she's been to the poor people of Herrington; and if all the chentry was like her it would be a fine thing for the town. But

maybe we'll be seeing her again some day? She'll be coming back to Herrington, I'm thinking, when she'll be tired of all the grand people in London?'

'I'm no' sure about that' said Jessie dubiously. 'You see it's like this: Miss Crissie will be hevving so much on her mind that she'll maybe not be caring to cross the Minch again for a long time after she goes away' ('And that's the first true word I've spoken. May the Lord forgive me!' she added to herself).

While this conversation was taking place, Miss Crissie sat in her room deep in thought. The evenings were getting chilly, but the cheerful fire burning in the grate kept the room warm and flickered elusively on the furniture. At times it played on the pale face of Miss Crissie, and showed a tear glistening on her cheek. Suddenly she rose and opened a cabinet which stood in a corner of the room. It was a richly-carved piece of oak, which had been in her family for generations, and was greatly prized by its owner. From a drawer of the cabinet she took a photograph, yellow with age, and by the light of the fire gazed at it intently. It was the photograph of a handsome man of about five-and-twenty, in Highland dress.

'Allan mo chridhe' (my heart), she murmured, 'some people say that an old maid has nothing to do with love. But it's little they know of a heart that has been given away in its youth, and can never, never, be taken back in this world—or the next. Perhaps when we meet in the hereafter'—and her eyes brightened at the thought—'you may know it was my foolish pride that parted us—but till then'——She again rose and replaced the photograph carefully and tenderly.

'Yes,' she continued, 'it's hard to leave the old house and the dear old town, and go away into the pitiless world. But the Lord's will be done.'

선생님, 그는 그리고 얼마를 만나왔는데 그리고 맛있다.

Miss Crissie's romance, jealously hidden from the world, can be told in a few words. Allan Gordon, home from India for a holiday, was her first and only love. But she was proud and dissembled her love, fearing to appear to be won too easily. Allan, impatient and ignorant of woman's ways, mistook her reticence for indifference, went away from Herrington one day in a huff, and came back with a baby-faced bride from the South. Miss Crissie's life was crushed; but never a sign did she give of her great sorrowexcept that she became more gentle, more tolerant than of yore. Allan returned to India with his bride; but she, poor thing, soon withered and died. The last Miss Crissie heard of Allan was that he had succumbed to a malignant fever; and her heart was after that buried in an Indian grave.

On the day of the roup Ian the Bellman was busy. He had not had a job for days, and

funds were getting low. Truth to tell, Ian was not always eager for a job. He was, it must be confessed, horribly lazy. Needless to say, an appropriate nickname had been found for him, and he was known in Herrington as 'Lazy Ian.'

Never by any chance were Ian's hands out of his pockets except when he was on duty. His day-duties were intermittent, but each evening at eight o'clock saw him out with his dear old 'Cracker,' 'Cracker' was the name he had somewhat ambiguously given to his bell. In Herrington there existed a union of shop-assistants, whose chief function consisted in reminding their employers every evening that they had promised to close at eight P.M., and that the appropriate moment for so doing had arrived. The masters' watches had a curious tendency to chronic slowness, while those of their assistants were generally found to err on the side of rapidity. To maintain the necessary equilibrium, and offer to both sides an unquestionable authority on 'the great subject of the hour,' the services of 'Lazy Ian' were requisitioned by the assistants, with the approval of their employers. The Free Church clock has been from time immemorial the standard by which all Herrington watches are set, even the 'Moderates' acknowledging that the Frees 'know the time o' day.' Ian took his time from this clock every evening shortly before eight, and marched (he never slouched at night) from one end of the town to the other with 'Cracker.' On arriving at a shop door he paused for a moment -then 'Cracker' rang out aggressively its monotonous chant: 'Put up your shutters! Put up your shutters!' and the tired assistants thanked heaven for 'Good Old Cracker,' the curfew bell.

But this affair of Miss Crissie's was something quite out of the ordinary. Ian pondered the matter in his mind, but could make nothing of it. 'Ah, well,' he concluded, 'it's no consairn o'mine; but it's a great peety.' And so saying, he stopped at the first corner, made 'Cracker' speak out vigorously, and announced first in English and then in Gaelic to all and sundry of her Majesty's lieges that a sale by public roup of Miss Crissie Campbell's furniture and other effects would take place at 27 Seaforth Street on that day at two P.M. precisely. The same process was repeated at the next corner, and the next, until everybody had heard the announcement, or, at least, in Ian's opinion, ought to have heard it.

The roup was a scene of great excitement. About ten people went there, thinking they might perhaps venture to make a bid 'if the things were going to be sold dirt cheap anyway.' Fully ninety went out of curiosity, and to watch the ten bidding against one another. It was known that the house was to be sold by private treaty, and rumour said that some stranger had outbid

all the other buyers, and was likely to secure the property. Would the stranger make his appearance at the roup of the furniture? was the question which agitated the minds of the curious. When Neil Mactavish, the auctioneer (a mainlander), mounted his rostrum, adjusted his spectacles, and put up lot No. 1, the excitement grew intense. 'A magneeficent dining-room soot, leddies and chentlemen - all solid mahogany, of the first water-none of your meesarable pented deal in this hoose. Everything is chust as good as if it was made for Queen Victoria herself, God bless her. You'd better be queeck with your bids, for, as sure as death, you'll never get such a chance again. How much for the magneeficent mahogany soot? Did you hev the face to say five pounds, John Maclean? We'll no' come here to choke, John Maclean, but to transac' bussniss. You'd better be going home if you canna be saying something sensible. It's a peety you hev so much money to throw away.' And having silenced the unfortunate John Maclean with this barbed shaft of sarcasm, Neil resumed: 'Now then, who bids-ten pounds? ten pounds bid for the magneeficent soot-it's chust throwing it away as if it was dirt, but it'll do for a start-any advance on ten pounds?-eleven pounds-eleven pounds bid -it's clean redeeculous this-eleven pounds tenhoch, why doesn't somebody bid eleven pounds ten and sixpence?—as sure as death I'll pay the sixpence myself.' 'Twenty pounds,' said a quiet voice from the rear of the crowd, and a hundred pairs of eyes were turned on a man of about fifty years of age, with a bronzed face and a dark moustache, in which streaks of gray were showing. 'Twenty pounds,' cried Neil exultingly-'that's something like the thing now, and it's a shame to you all that it's coming from a stranger it is -any advance on twenty pounds? Ma hammer'll be down in a meenat-going at twenty poundsgoing-going'-and the hammer descended. And so the roup proceeded, the dark stranger taking the breath away from the assembled hundred by his reckless bids. Latterly, nobody competed with him; he got everything at his own price, and a good price it was in every instance. Last of all, the wonderfully - carved cabinet was put up for sale, and, being unique of its kind, it was expected to fetch a fancy price. It was an open secret that Geordie Simpson, the rich fishcurer from Peterhead, had promised the cabinet to his wife as a present, never fearing his ability to outbid any one in Herrington. He knew he would have a bad quarter of an hour if he went home without that cabinet, 'I'm no' going to say one word about this lot,' announced Neil, 'for you'll all be knowing about Miss Crissie's kist-it's chust a wonderful kist for keeping purns and needles, and-and bibles, and -and photographs. How much for the kist? "A'll gie you five pun', said Geordie Simpson in a tone which implied that the 'kist' was as good

as his. 'Seven pounds' came the quiet voice from the rear. 'Seven pun' ten,' retorted Geordie angrily. 'Ten pounds,' called the stranger. 'Fifteen,' yelled Geordie furiously. 'Thirty,' again came the calm voice, while Neil rubbed his hands gleefully. 'Tak' it then, and be hanged tae ye,' shouted the discomfited Geordie, as he made his way through the crowd, while visions of a disappointed virago's wrath floated before his eyes.

The roup was at an end. All eyes were turned to the spot where the mysterious stranger had stood, but he had disappeared as suddenly as he had come upon the scene. A note, signed 'The Purchaser of the Furniture,' had, however, been handed to Neil Mactavish, telling him to call at the Royal Hotel that evening for payment and instructions.

On the evening of the roup, Miss Crissie stayed with her married sister, Mrs Macpherson, who was still known to the elder generation of Herringtonians by her maiden name of 'Miss Mary.' The faithful Jessie had kept the two ladies well posted in the events of the roup, and they were now waiting for Neil Mactavish, who had promised to call after his interview with the stranger, and tell them all the news.

Miss Crissie and her sister started from their chairs as a knock was heard at the door. 'It's Neil,' they said. But they were wrong. Three minutes later, Jessie announced, in awe-stricken tones, 'The stranger of the roup is in the drawing-room waiting to see Miss Crissie, and he said, "Never mind my name, Chessie," and he laughed. "Chessie," he says, quite friendly like, and it's him that had never set eyes on me before.'

Miss Crissie, assuming the dignified air which so well became her, went upstairs to the drawing-room. The stranger rose to meet her as she entered. 'Crissie,' he said. The tone of his voice

bridged twenty years. 'Allan,' came the faint response. 'You thought I was dead, Crissie. Well, so I have been to the world for many years; but, as you see, I haven't died of fever. I arrived in England just in time to hear of the failure of the West Bank, and by a side-wind I heard soon afterwards of your house and furniture being put up for sale, so I put two and two together. My solicitors have just completed the purchase of the house, and you know where your furniture goes. I intend to spend the remainder of my days in Herrington, and propose to take possession of the house and furniture shortly. But upon one condition-failing which, I return to India next week. Crissie, need I tell you the condition?' he asked, tenderly taking her hand in his.

For the second time in her life, a severe struggle between pride and love took place in Miss Crissie's breast. But she had learned her lesson, and this time love emerged victorious.

'Allan, I have always loved you, and I always will,' she said simply.

When Jessie found that her 'angel' was none other than Allan Gordon, and that Miss Crissie was to remain in the old house after all, her astonishment was unbounded.

'To think that I didn't know Mester Allan, and him knowing me at once!' she exclaimed. 'Well, well, it's me that's a proud woman the day. And when will the merrage be, Miss Crissie?'

The next time Jessie met her crony Ishbel she had news indeed to tell her.

'Miss Crissie is not goin' to her fine house in London after all. She's goin' to get merried, Ishbel.' And then after a pause sufficiently long for the startling news to take effect, she added: 'I'll tell you who to the next time I see you.'

THE MONTH: SCIENCE AND ARTS.

EGGS FROM AUSTRALIA.



T many years ago the possibility of shipping eggs from Australia with any likelihood of their reaching this country except in a decomposed condition would have been ridiculed as utterly unworthy

of consideration. To-day the thing is not only being accomplished, but the eggs arrive in such first-class condition that they pass as new-laid. This has been rendered possible by the universal employment of refrigerating apparatus on shipboard. The eggs, while still perfectly fresh, are forwarded by the Australian poultry-keepers to the cold store, and are shipped to England at the time when eggs are scarce, and consequently

at their dearest. Many thousands of dozens, packed in boxes with cardboard divisions, filled up with dry pea-husks, are now forwarded to this country from November to January. In a recent consignment the local price of the eggs at the time of shipping was fivepence-halfpenny per dozen, the freight and packing cost about threepence per dozen, and they realised one shilling and sixpence per dozen retail on arrival at this side of the world.

A NEW WHEEL.

Of all recent inventions having reference to locomotion, that of the pneumatic tyre is perhaps the most important, and in the very few years since its introduction it has brought large fortunes to many. What may possibly be a serious

rival to it in its application to vehicles other than cycles has just been patented by Mr Peter Fyfe, chief sanitary inspector of Glasgow. Mr Fyfe's experiments were with a view to reduce the vibration communicated by an ordinary wheel to vehicles as well as to the horse attached to such vehicles. This has resulted in the invention of what he terms a pneumatic sleeve, which is made in one piece and drawn tightly over the axle-box. The wheel is pushed on to this rubber sleeve and then secured by steel bands. The sleeve, which is cellular in structure, is then pumped full of air to a pressure of about thirtyfive pounds to the square inch. These cells are, as at present designed, four in number; and after charging with air each one can be isolated from the other by the turning of some small screws. By this arrangement the axle and axle-box are floated, and do not touch the nave of the wheel. Careful tests show that seventy-seven per cent. of the shocks which, under ordinary conditions, would be transmitted to the vehicle are taken up by this cushion of air and then dissipated. Three vehicles of different types have been fitted with pneumatic sleeves to their wheels, and careful diagrams taken by means of attached apparatus, the results being considered by experts as highly satisfactory. By fitting the pneumatic cushion to the middle of the wheel instead of to its periphery, it will at once be seen that puncturing, in the ordinary sense of the word, is quite out of the question. The reduction in the amount of rubber necessary in the manufacture, as compared to the pneumatic tyre, points, we should think, to a great saving in cost of material.

LIZARDS AS PETS.

There always has been, and probably always will be, a feeling of repulsion of the human family towards anything in the shape of the reptile, from snakes to toads. Even the harmless lizard comes in for its share of dislike. We say harmless, for the only one having poisonous qualities is the Heloderma horridum of Mexico; all the other species known are innocent of evil intentions towards man. Mr Saville Kent, who has made a study of the Australian lizards, recently read a paper on the subject at the Camera Club, London, and warmly espoused the cause of these interesting and muchlibelled creatures. He has kept many kinds as pets, and found them most tractable and appreciative of kindness. They will run about on his lawn in the most fantastic manner on their hindlegs; will kill all kinds of insects which are prejudicial to the garden; or will, in colder weather, warm themselves like cats on the hearthrug of his study. The Geckos are, perhaps, the most interesting to keep as pets. Their feet are furnished with sucking discs which enable them to run up walls or traverse ceilings in search of the beetles, moths, and flies which form their food. Some of the Australian lizards attain a length of seven or eight feet, and are by the ignorant often mistaken for half-grown alligators. These creatures are carnivorous, and so addicted to eating birds and eggs that poultry-yards suffer from their depredations.

INTERESTING ARCHÆOLOGICAL DISCOVERY.

On the buried walls of Pompeii, as well as at other Roman sites, and in Rome itself, various rude pictures and writings have been unearthed, to which the Italians have given the name graffiti-scratches or scrawls. One of the best known of them was discovered on the Palatine in the year 1857, and consists of a caricature upon the Christian religion, drawn at a time when Rome was pagan. This incised drawing is a rough outline of a crucified man with a donkey's head, by the side of which is another figure in the act of worship. Below these figures appears the inscription in Greek, 'Alexamenos worships his God.' The stone with this most interesting memento of the early years of the Christian era is now preserved in a Roman museum. Professor Marucchi has recently made a discovery, in the same place from which this stone was removed, of another graffito, which he believes to have been meant for an answer to the taunt implied in the one just described. It consists of the words, 'Blaspheme indeed, but God is with us.' Still more recently he asserted that a series of sketched outlines, also on the wall of the Palace of Tiberius, heretofore understood to be a representation of rope-dancers, was a sketch - possibly by an eye-witness - of the crucifixion of Christ. This startling interpretation he was, however, led again to withdraw.

SPITZBERGEN.

Mr E. T. Garwood, who accompanied Sir Martin Conway on a recent expedition to Spitzbergen, has given an account of their wanderings into the interior of that inhospitable island to the members of the Camera Club, London. The place is quite destitute of inhabitants, for although the weather is pretty open in the summer-time the prevailing temperature in winter is 40° below zero. At one time the Russians made an attempt to colonise this No Man's Land; and happening to have on hand some wretched culprits who had been condemned to death, offered these men their lives on condition that they should be landed at Spitzbergen and stop there. They accepted the reprieve, and were duly landed on the island. But before the ship had time to return, the men begged to be taken back and executed. They returned to Russia, and their lives were spared.

FROZEN FOG.

Spitzbergen is not an unbroken ice-sheet, as many persons supposed it to be. Glaciers there are in plenty, but there is much open ground and fine mountain scenery. Fogs are prevalent, and Mr Garwood described a peculiar effect due to this condition of the atmosphere which does not

seem to have been ever noted by alpine climbers. He has seen the face of a mountain covered with spicules of ice—a kind of exaggerated hoarfrost—some of the icicles standing out horizontally from the wall of rock, and measuring as much as eighteen inches in length. They are evidently generated by the action of fog—and grow by the constant addition of moist particles. Fogs will often continue for many days together, and they are so dense that one cannot see a companion who is more than two or three yards away.

ELECTRICAL PROGRESS.

Mr J. W. Swan, F.R.S., the newly elected president of the Institution of Electrical Engineers, gave much interest to his inaugural address by summarising the work which electricity was accomplishing in many manufactures. He regarded the application of the electric current to chemical industries as most important, and urged upon young engineers the great advantages which might accrue to them by studying this phase of electrical science, for it was one of those fields of inquiry which was by no means filled up. Onethird of the pure copper which was produced in the world was obtained by the agency of electricity, and the present cheap price of aluminium -which in 1855 was double the present price of silver-was entirely due to the development of the electrolytic method of its production. The various alkalis - chlorine, chlorate of potash, sodium, and calcium carbide-were some of the substances much used in our arts and manufactures which were now produced by electrochemical methods. Factories employing the electric current naturally looked out for localities where water - power was available for turning their dynamos. Unfortunately the direct exchange of heat for electricity was as yet possible only on a very small scale, therefore there was plenty of room for the steam-engine as intermediary aid.

A BLIND INVENTOR.

It is an undoubted fact that certain unfortunate persons who are blind can do far better work with their brains and hands than many of those who possess the blessing of sight. Here is a case in point. Mr A. J. Gormand, who is totally blind, has invented a most useful tool in the form of a centre-finding compass. This instru-ment resembles an ordinary pair of calipers, but it has a central adjustable leg which can be raised or lowered so as to accommodate itself to convex or concave surfaces. This same blind inventor has also contrived a machine for making the wire whisks known in the trade as 'French whisks, which will make four of the articles in the time in which a sighted man will, unaided, make one. Mr Gormand has not always been blind; and, strange to say, before that calamity befell him he was not a mechanician, but spent the greater part of his life on shipboard.

MODERN MEN-O'-WAR.

The average educated person knows far more about the general structure and arrangements of an old three-decker than he does about the ponderous metallic engines of war which have now usurped their place, and the chief reason for this is the delightful air of romance with which the old vessels are invested by certain novelists, and the real stories of heroism which will ever be linked with their memory. But there is much that is interesting about the more prosaic battleships of to-day; and Mr Yates, the chief constructor at Portsmouth dockyard, who lately delivered a lecture on this subject, found many attentive listeners. He tells us that it is impossible to realise the magnitude of these floating monsters, for the most important part of each ship is below water: and that submerged part displaces a mass of water equal to the total weight of the ship. The size of the ship, and its consequent weight, depend upon a number of considerations, such as the size of the harbours or docks she would be required to enter, and the design of the ships with which she would co-operate. Then the weight was distributed in such a way that the hull structure was only responsible for one-half. Armourplating was now of such perfect manufacture that a modern six-inch steel plate was as efficient as an old pattern fourteen-inch plate of wrought iron. This armour, with the guns, costs about half the total of the completed ship.

PERSIAN DATES.

An interesting account of the cultivation of dates in Persia is to be found in a recent report of the U.S. minister. The date-palm is indigenous to Southern Persia, the groves being chiefly confined to sheltered valleys and plains where the temperature is mild all the year round. The palm will bear much heat, but is very sensitive to cold, and should the head of the tree be touched by frost the whole very quickly dies. The date-palm will not flourish within twenty-five miles of the coast, in consequence of the salt which impregnates both soil and air; it bears no fruit until it is about ten years old, and will under favourable conditions have a life of one hundred years, and attain a height of from fifty to sixty feet. The total production of dates in Persia is about two thousand two hundred tons annually, about half of which is consumed in the country in a raw state, while large quantities are manufactured into vinegar, arrack, &c. The remainder is exported to various ports of Europe, India, and America,

WESTRALIAN DESERTS.

The Hon. D. W. Carnegic has recently returned to England after having traversed 3000 miles of unmapped and unexplored country in the heart of Western Australia, an expedition which occupied

thirteen months of toilsome travel. It was quite a small band that faced the unknown perils of this remarkable journey-four white men and a native tracker, accompanied by nine camels, which carried provisions for five months. This terra incognita had been crossed from east to west, but never from south to north, and it was in this direction that the expedition headed when they left Coolgardie in July 1896. The country was found to be a sandy waste, almost bare of vegetation, and the only water to be had was from the scanty native wells. In some places huge ridges of sand barred the track, and, as the height of these varied from twenty to one hundred feet, the work of getting over them was most arduous. Very small tribes of nomadic blacks were met with, people without any settled homes, for they have always to be on the move as their watersupply gets exhausted. 'They are only one degree removed from animals, says Mr Carnegie. On 10th December the expedition reached Hall Creek, and here they made a stay of three months, and refitted. As a result of the expedition, Mr Carnegie says: 'We have proved the whole of the interior of Western Australia between Coolgardie and the Kimberley goldfields to be quite useless for man or beast. We saw no auriferous country between Lake Darlot district and Kimberley.

SUBTERRANEAN NOISES.

The village of East Haddam, in the lower Connecticut Valley, has for a long time been associated with what are known as the 'Moodus noises.' The word is a corruption of an Indian name meaning 'the place of bad noises,' for the phenomena to which the name refers were known long before the white man appeared in the district. At the beginning of the past century the first noteworthy account of these strange subterranean noises or explosions was written by the Rev. Mr Hosmer, who speaks of sounds and tremors coming from the earth 'which are sometimes very fearful and dreadful. Oftentimes I have observed them coming down from the north,

imitating slow thunder, until the sound came near or right under, and then there seemed to be a breaking like the noise of cannon shot or severe thunder which shakes the houses and all that is in them.' After a period of rest lasting twelve years, these noises, it is reported, have begun again, much to the alarm of the inhabitants of the district, and they are again compared to muffled thunder and the crash of artillery.

A NEW GALVANISING PROCESS.

An important paper was read at a recent meeting of the Franklin Institute on an improved method of galvanising wire and wire goods. The term galvanising as here applied is a misnomer, for the process is not an electrical one. Hitherto it has consisted in drawing the iron wire slowly through a large tank of melted zinc, and upon emerging therefrom through wipers of asbestos or other material to remove the superfluous metal. This method is very slow and expensive, for the iron must be raised to the same temperature as the molten metal, and the amount of the latter is often 50 or 60 tons, in order to ensure sufficient length to the wire to be operated upon. By this new system the wire is placed in its original coil in the bath of molten zine, which need not be of extraordinary size; and after sufficient time has been given to ensure adherence of the zinc, the coil is removed and placed in a centrifugal separator, with a speed of about 750 revolutions per minute, the superfluous metal is thrown off; and while the coil of wire is yet hot it is submitted to a jarring action on a block so that the various strands shall not be welded together. An alternative plan is to unwind the coil and rewind it at such a distance that the metallic coating upon it solidifies during transit. This new system, the practicability of which has been demonstrated by a United States Galvanising Company, saves so much time, and can be accomplished by such simple means, that it is likely to be universally adopted.

THE DEVIL'S WOODYARD, TRINIDAD.



T was at after-dinner coffee one night in the wet season that I first heard of 'a queer place in the big woods that goes by the name of the Devil's Woodyard;' and, prompted by curiosity, I

consented to visit it with a planter friend,

'It is only about six miles from us as the crow flies,' he said; but we had 'to struggle up and down steep and slippery hills, through seas of mud of varying depths, tacking backwards and forwards in a vain search for terra firma,

with showers of warm, muddy water squirted up from our animals' feet, and with the constant fear that we should have to wade away and leave the horses hopelessly buried in a deep, miry hole.

Thus we worked our passage for two solid hours under a scorching sun before we reached the grateful shade of the forest and commenced to thread our way over a network of roots, round huge towering tree-stems like cathedral arches, passing a varied panorama of palms, creepers, and orchids. There was little animal

life visible, or even audible, at that mid-day hour; only now and then the mysterious stillness was broken by the two plaintive minor notes of the large wild-pigeon. A cordial welcome was, however, extended to us by the ever-thirsty mosquitoes, and the busy movements of a train of driver-ants across our path told us that rain was not far off.

We left the main track for a narrower one, and then dismounted, as we were close to our destination and on uncertain riding ground. Here my friend pointed out a broad, deep fissure, like the rent caused by a violent earthquake shock. With cutlasses ready for action and eyes on the alert for snakes, we pushed or cut our way through overhanging leafy curtains for about thirty yards, till we suddenly came upon a clearing and were face to face with the mud volcano known generally to the natives as the Devil's Woodyard. It was a large circular spot of level mud-flooring eighty yards in diameter, without a vestige of living vegetation, strewn all round its edge with dry fallen and falling trees and boughs, and dotted about with little volcanic cones from six inches to three feet in height. Some of these cones that were in operation belched forth bluish mud containing small, smooth red stones, or baked clay, that seemed to have passed through the action of fire. There are tracks of game across the Devil's Woodyard, but the most intrepid hunter will not shoot over it after nightfall. And, indeed, it must be an uncanny place at dusk or by moonlight; for the dense encircling belt of living green contrasts so markedly with its barren desolation, and the gurgling, spouting sound of the unseen subterraneous powers forcing their way to the surface is so suggestive of the helpless plight that might at any moment overtake a curious visitor.

After ten years of home wanderings, I again found myself near the Devil's Woodyard, and renewed my visit to it under the following circumstances. At four o'clock one dark, still morning in February, a planter in the neighbourhood, who was setting his labourers to work, was startled by the sound of a strange, hoarse rumbling in the woods, like the rushing of an express train at full speed over a quarter of a mile of rail. At daybreak a small exploring party set out for the scene of the explosion, cautiously peering and listening, and half-expecting renewed rumblings that fortunately never came. It was not now necessary to turn off the beaten track to look for the volcano, for its charmed circle of death and havoc had widened to a diameter of at least one hundred and twenty yards. A few seconds of violent upheaval had raised its surface twelve feet above the surrounding forest, uproofing smaller trees that were still standing at all conceivable angles, and enveloping the spurs of the larger leafy monarchs that alone stood upright in the track of the invading flood. Wishing to get a bird's-eye view of the scene, I climbed a tree, from which the appearance of the volcano was that of a huge over-boiled pudding that had collapsed without breaking up.

Sixty yards from the circumference of the Woodyard there were several wide, deep chasms in the earth, and only a few feet from one of these was a crooked hut. The owner was an East Indian, who had been tempted by the richness of the soil to buy a piece of land in that strange place from the Crown. The poor fellow had had a bad time of it. Suddenly awakened by a severe earthquake, and deafened by the roar of the explosion, he could not tell which way to run in the darkness, and waited for the morning light with feelings that can be more easily imagined than described. When I saw him, he had somewhat recovered his composure, and, pointing to a spot where the overflow had swallowed up his garden of maize, he said, 'Queen must gi'e um more garden, massa; debbil no' mindum picket!' (that is, has no regard for boundary marks).

In three weeks the crust of the earth had hardened to such an extent as to enable me to walk all over the volcano, and fresh cones were rising in every direction. There can be no reasonable doubt, I think, that most of the hills in these West India Islands, where not the work of coral insects, are raised after the pattern of, and with the same volcanic agency as, the Devil's Woodyard.

MY LOVER.

- 'I LOVE you, all the world, I do; So says my lover bold, My lover who is scarcely two, Though I am ages old.
- 'I love you, all the world, I do,'
 He says with close embrace,
 And eyes of soft unshadowed blue,
 Upraised to read my face.
- 'I love you, all the world, I do;'
 Go out in after life
 With just these simple words to woo
 A woman for your wife.
- 'I love you, all the world, I do;'
 Go out with eyes like these,
 And she that turns in scorn from you,
 Oh she'll be hard to please.
 M. G. W. P.

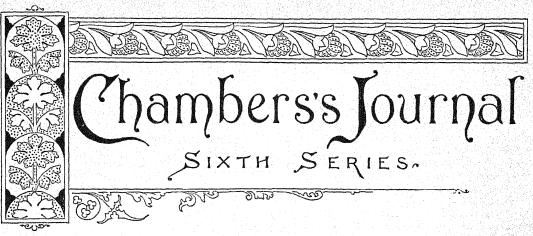
*** TO CONTRIBUTORS.

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'SANTA ANNA.'

BY FRED. M. WHITE.

CHAPTER I.



DECOROUS hush fell upon the auction-room. The excitement of the virtuoso is usually of a mildly genteel type; but there are exceptional moments, and the brief period preceding the fall of the

hammer on the sale of the 'Santa Anna' was one of them.

By degrees the bidding had advanced, the stream of golden promise went on until a timid millionaire modestly perspiring in the background suggested ten thousand guineas. Mr Forrest looked up with gentle approbation.

'Ladies and gentlemen,' he murmured, 'the picture is now on sale.'

To the uninitiated this meant that the reserveprice had been reached. A little man with a remarkably dirty face bobbed up, snapped out 'ten thousand five hundred,' and immediately fell to chewing his catalogue again. In a less sacred assembly they would have laughed at the seedy man with real estate secured in the lines of his features, but Mr Forrest bowed his thanks. The Semitic unit had come from Vienna on purpose to buy the 'Santa Anna,' and Forrest could have honoured his draft for half a million on sight—appearances go for so little where the *virtuosi* are concerned.

A well-known dealer advanced five hundred, and then the biddings drooped. Mr Forrest dropped into forensic art. The 'Santa Anna' had been propped up on a table before him—a canvas about six feet by four, and full of glowing colour. Mr Forrest tapped the frame with decorous familiarity.

'Need I enlarge upon this famous, this unique work?' he said. 'Need I recall to your recollection the fact that the purification of the saint was a subject specially selected for the brush of Leonardo da Vinci by Francis I. himself, and designed to hang in the palace of Chambord? It has been established clearly enough that immediately after showing this picture to his royal patron,

the great artist expired suddenly in the king's arms. I think my last bid was eleven thousand.'

The millionaire hesitated. He regretted that his knowledge of pictures was so much less than his acquaintance with contangoes and futures. You can 'corner' diamonds and petroleum, but a picture trust is another thing. The Viennese dealer bobbed up again, suggested eleven thousand five hundred with the air of one who answers a conundrum, and ate another octavo page of his catalogue. As to the wealthy amateurs, they had dropped out of the hunt long ago.

Roscoe, of Hunt & Roscoe, the eminent dealers, edged a little nearer the rostrum—a slight, clean-shaven man, who looked more like a Chancery barrister than a buyer of pictures and armour. Both Hunt and Roscoe were young men, but both enjoyed excellent reputations. They were bold and successful. The Vienna gentleman scowled as he spotted a dangerous rival.

'Twelve thousand,' said Roscoe. The seedy one put a thousand on to that. Nineteen thousand was bid, and then Roscoe added one thousand more. His mien was calm and resolute, a crumpled telegram crushed in his hand gave him courage. With a patient sigh, Rosenthal of Vienna rose and went out. Like the philosopher he was, he swallowed his disappointment, and fell to counting up what his expenses would come to.

A ripple of applause followed, subdued applause as befitted the sacred place, and then the hammer came down with a snap. The 'Santa Anna' had been the last lot, and the audience filed out. They had something to talk of for some time to come, as such a red-letter day did not happen very frequently.

Quite coolly Roscoe pushed his way up to Forrest's desk. The latter nodded as one does to a familiar figure.

'You gave quite enough for it,' said Forrest. 'Still, I dure say an advertisement of that kind is worth a good bit.'

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APRIL 2, 1898.

'Well, yes. It is certain to go the round of the papers, and I confidently look forward to seeing a few leading articles thereon to-morrow. All the same, I didn't buy the picture quite as a speculation.'

'Got a customer for it, eh?'

'I think so. But one never can be quite sure. That's the worst of our business. We want all our big profits if we have a thing like this on our hands for a year or so. Every week that canvas hangs up in our shop I calculate it costs us twenty pounds.'

Roscoe departed a little later with his treasure. A short time after the same was reposing on an easel in the private office of the two partners behind the handsome premises in Piccadilly.

Hunt stood contemplating the new purchase with an admixture of fright and pleasure. He was a nervous man with bold ideas, which were no sooner carried out than they filled him with dread.

'It's a heap of money,' he murmured.

'Can't be helped,' Roscoe replied. 'It was a game of brag with Rosenthal, and for once in a way I got the better of him. Besides, we shall have all the *kudos* of the purchase, and make a good profit into the bargain.'

'And if the South African doesn't come up to the scratch?'

'What a fellow you are!' Roscoe exclaimed with some pardonable irritation. 'Haven't I got the telegram in my pocket?'

Hunt was fain to admit this comforting evidence. That was the worst of having a partner with a sluggish liver, Roscoe thought.

'It would have been absolutely criminal to have lost such a glorious chance,' the latter continued. 'Read the thing again.'

So saying, the speaker took from his pocket the pink paper upon which post-office telegrams are transcribed, and flattened out the crumpled sheet. It bore the Southampton mark and ran thus:

'Just landed from Cary Castle; seen advertisement of Forrest's sale. Can't get up to-day. Buy Santa Anna for me. Open commission.—BARON BRANTANO.'

The telegram was addressed to one Moss, a picture-dealer in a small way who occupied a sandwich of a shop next to the palatial establishment of Hunt & Roscoe—indeed the latter emporium had once formed part of their premises. A careless telegraph-boy had placed the message in the hands of Roscoe himself and had hurried out whistling. Without noting the address, Roscoe had torn open the envelope and mastered the contents,

Then he saw that the message was intended for Moss. Nevertheless he did not immediately deliver the same. He stood pondering, and the longer he pondered, the brighter did the scheme for the aggrandisement of the firm glitter before him.

There would be a row, of course. But the telegraph boy would assuredly be prepared to

swear if necessary that the message had been delivered at the proper address. He would do this for his own sake, and would be doing. Hunt & Roscoe a good turn at the same time,

The commission on the purchase of the 'Santa Anna' would be a small affair. To buy it out and out, and sell the same to the South African magnate would be quite another matter. Hunt shared this opinion.

'Nobody can touch us,' he said. 'If that pinchbeck Baron requires the picture he will have to pay through the nose for it. Only we had better be careful that we are going to deal with the genuine Simon Pure. Let's send round to Lloyds for a list of passengers on the Cary Castle.'

Information from Lloyds proved to be quite satisfactory, and again this was confirmed by a paragraph in the *Standard*, to the effect that amongst the passengers landed from the *Cary Castle* was Baron Brantano.

It is needless to remark that the Baron had loomed large on the public eye of late. Some day a book will be written upon the materialisation of the modern millionaire. He comes, like the Baron, mistily and vaguely, then suddenly he becomes a being crystallised in newspaper paragraphs. He has gold and silver mines, he has 'cornered' all the diamonds in the universe; he has given £100,000 for a picture. Then he fades away, and a new plutocrat occupies his place. But when and where he comes, he always finds a place in the public confidence.

Thus Baron Brantano. So far as any one could tell, he was an adventurous Englishman who had served the king of the Belgians on the Congo, hence the title. After that he had devoted himself to the millionaire business with distinct success—perhaps because it is the only profession not overcrowded.

'Good,' Roscoe exclaimed, 'we shall make £5000 out of this. You notice that Moss was to have had an open commission. Nobody will have the least suspicion of us. Therefore we buy the picture at any cost, and then we can offer it privately to the Baron. Of course his game is to make a present of the same to the National Gallery with a view to establishing a position in society. What a slice of luck!'

The millionaire came ostentatiously to the 'Hôtel Métropole' a day or two later, and the evening papers fell down and worshipped him. A few days passed, but no sign came from the Baron, and Moss appeared to be as friendly as usual. Could it be possible that the Baron had changed his mind?

'Hadn't you better go and see him?' Huntsuggested.

'Don't be an ass,' snapped Roscoe. 'How can I go and see him? I couldn't show him Moss's telegram, could I?'

'I don't see why you shouldn't,' Hunt replied.
'I have been making a few inquiries, and I find

that Brantano has been buying pictures. Why not call upon him, and ask him to come and look at the Santa Anna?

Roscoe pondered a moment. Something would have to be done shortly. After all, there could be nothing suspicious in carrying out Hunt's suggestion. If the Baron had forgotten the incident it might recall the same to his memory. Perhaps Moss might have faded from his mind. Then, when he knew where the picture was, he would naturally trouble no more about Moss, who thus might never even know that a telegram had been sent him.

'On the whole, I think I'll go,' said Roscoe.

Without further delay he proceeded to put his intention into effect. Roscoe was fortunately enabled to see the millionaire after a wait of not more than half-an-hour, which, under the circumstances, was quite cordial.

Brantano was English beyond a doubt. He was quite a young man, stout of figure and guileless of air. He was almost clean shaven, with a prominent thin nose and a firm yet receding chin. The hair on the temples was somewhat thin and grizzled, and there were countless wrinkles round the keen, beady eyes. The Baron's hand was slightly shaky; he was quick and nervous.

'I don't remember your name, Mr Roscoe,' he said. 'But if your business is pressing, I can

spare you ten minutes or so.'

Roscoe plunged at once into the subject. He noted with satisfaction that the Baron smiled when the 'Santa Anna' was mentioned. Clearly there was no mistake about the matter.

'It is a magnificent picture,' Roscoe concluded.
'A magnificent picture truly,' echoed the capitalist. 'I am no great judge, but I fell in love with it directly.'

'You have seen it before, then?'

'Never till I landed in England this week.'

'But there must be some mistake here,' Roscoe suggested. 'Did you not land from the Cary Castle on Monday week?'

'Certainly I did. And I remained in Southampton till Wednesday.'

Roscoe looked puzzled, as well he might.

'Then I fail to understand how you could have seen the picture,' he said, 'considering that on the Tuesday we purchased the picture from Forrest's people, and that it has not been out of our possession ever since. The telegram'—

Roscoe checked himself. He had been on the point of making a dangerous admission. The Baron smiled in an indulgent manner.

'Then there must be two "Santa Annas," he said. 'Mine came from Lord Maplehurst.'

'And ours came from Lord Maplehurst as well,' Roscoe burst in. 'There is some extraordinary mistake here. Perhaps I had better hear your story, Baron.'

'With pleasure. As you may not be aware, I am a Roman Catholic. It has always been a

great idea of mine to send the Pope a fitting present on his birthday. By chance I heard the history of the "Santa Anna" from Lord Maplehurst's brother, Mr James Maplehurst, whom I know very well in Kimberley. I offered £20,000 for the picture, and it was refused. Lord Maplehurst called upon me on the morning following my arrival in England, much to my surprise, with the picture. It had been offered for sale the day before, and fetched just the sum I had offered, at which price it was bought in. Would I give another £1000? I would and did, in Bank of Bechuanaland notes, and the picture was mine. Moreover, as his lordship was going abroad, he offered to see the picture safe to the Vatican for me, and I consented. These things always come to those who know how to wait, Mr Roscoe.'

A cold perspiration stiffened Roscoe's spine. Could it be possible that he had been made the victim of a heartless swindle? Could Forrest'—but that was absurd. That the Baron was telling the truth from his point of view was patent. But still the picture which had been offered for sale remained in Roscoe's possession.

'Then you did not commission any one to buy the picture for you by telegram or otherwise?'

Roscoe gasped.

'Certainly not. And I have neither written a letter nor despatched a telegram since I have been here. Perhaps it would be as well, Mr Roscoe, if you were to describe your picture.'

Roscoe proceeded to do so. The Baron followed

with fluttering interest.

'Beyond question one of these pictures is a forgery,' he said. 'All the same, as I got mine direct from the owner, I feel safe. If you like I will treat this interview as private, so as to give you an opportunity of consulting the police. Depend upon it, secrecy will be all in your favour.'

'The very thing I was about to suggest,' Roscoe cried, 'and I beg to thank you for your kind consideration. I will lay the matter before the authorities at once, and take their opinion upon it.'

Roscoe departed for Piccadilly in a state of mind easier imagined than described. Some instinct told him that theirs was the copy of the 'Santa Anna.' The pecuniary loss could be tided over, but the loss of prestige and reputation would be a most serious one from a business point of view.

Hunt took the matter far better than his colleague had expected. Men who suffer with a liver are apt to see trouble looming everywhere, but when it does come they understand how to take

it with philosophic resignation.

'It's no use beating about the bush,' he said.
'Some of us are the victims of a vile conspiracy.
The fact that the Baron sent no telegram on that day proves it. We simply can't go and make any fuss with the police at present, for the simple reason that we shall be bound to admit using a telegram belonging to somebody else.'

'Do you suppose it was a bona fide telegram?'

Roscoe suggested.

'That's a very good idea of yours,' said Hunt.
'We will suppose that the telegram was a clever forgery, and that the lad who delivered it had been dressed for the part by the actual swindler.
You'd know the boy again?'

'Certainly I should. He was a very smart

lad, I noticed.'

'And he came from the Circus office. Go there and lodge a bogus complaint against one of the boys, and ask to see them all.'

Roscoe departed at once. The business took a long time; but finally he returned with the information that every messenger employed in the Circus office had been brought before him, and that not one of them tallied in any way with the lad who had delivered the fatal missive.

'That is exactly what I expected,' Hunt said.
'We may make up our minds now that the telegram was a forgery, a fact we can easily prove by submitting it to an expert. Let's have the big magnifying-glass on the flimsy.'

A minute examination of the telegram disclosed the fact that an old message had been soaked

out by acids, and a new one substituted.

'You can't read anything,' said Hunt, 'but under the word "open" in the forgery, the heavy pencil of the operator has scored "cash" in the original. The rascals could take out the letters, but not the lines of the word "cash" cut into the flimsy. You may depend upon it this trap has been deliberately laid for us, the wire being addressed to Moss being most ingenious. The pseudo telegraph boy would never have made the mistake of going to the wrong shop,'

Roscoe was bound to admit the lucidity of this

argument.

'The next thing,' he replied, 'is to make quite sure that we have been duped. Let us get the picture from the safe. Once we are sure of our ground we will proceed to unravel the mystery—if we can.'

The 'Santa Anna' was anxiously examined. A forgery it might have been; but it was a desperately clever one. At the end of half-an-hour the two critics were still as undecided as ever.

'I can't tell what to make of it,' Roscoe remarked. 'Everything points to a forgery, and yet with that wonderful colouring before my eyes, I am bound to doubt it. Such pigments don't exist nowadays. What shall we do?'

Hunt squinted at a splash of vivid vermilion and coquetted with a smear of azure artistically applied, and said:

What we ought to have done before. Send

for Manders.'

Manders came in due course: a handsome man, a fair Van Dyck, so to speak; a Charles I. with a tendency towards whisky and unholy hours. But for these weaknesses and an ingrained contempt for popular taste, a man capable of being head of the profession. Too lazy to originate, and too proud for order work, he had become a prince of copyists.

'Well, what's the matter?' he asked. 'Can I

teach you anything?'

This is not the way for artists to address dealers of repute; but as the dealers allowed it to pass, the reader may. Roscoe explained partially. He also incidentally observed that the colours in the picture were wonderful.

'Can't be done nowadays,' he concluded oracularly.
'Can't it?' said Manders; 'much you know about it. I've been studying colours for years. And I've got back the old trick of the pigments. I could do you a Raphael or an Angelo that could deceive the artist himself. Why, only a few months ago I made a copy of this same "Santa Anna," and Maplehurst couldn't tell the difference. Not a bad idea when you are hard up, keep your picture and pawn it at the same time.'

The partners exchanged glances. Here was a discovery, here was the outstart, so to speak, of another aristocratic scandal.

Hunt was the first to recover himself. He led Manders gently to the spot where the cause of all the strife stood in a good light. Manders nodded at it as one does to an old acquaintance.

'Is this the picture you bought at Forrest's?'

he asked.

'The same,' Roscoe gasped. 'Is it the genuine picture or a'—

He could get no further. Manders coolly rolled a cigarette and lighted it before he replied, not without malice.

'The copy,' he said. 'I'll prove it to you if you like.'

ENGLAND'S GIFTS TO THE WEST.



IE writer remembers having read a critique upon Fronde's book on The English and the West Indies, in which the critic said he doubted if a less popular writer could have induced the British public to read

a word about the West Indies; and yet, he added, they are no mean adjunct to the empire.

Whatever of truth may have attached originally to this oracular opinion, one fact stands out with striking clearness. Without question, many things are conspiring at the present moment to make the British Colonies bulk largely in the national mind. Truly enough, with our ubiquitous empire we Englishmen ought to know something of its component parts, and so take a more intelligent

interest in the way this magnificent empire has been built up. It may be that our Colonies, at no very distant date, will join loyally in a grand scheme of federation, fascinating in its conception and worthy of so great a people.

It would seem that the splendid Jubilee celebrations of the past year had this important result—amongst many others—that they kindled afresh in the minds of Englishmen the flame of a lofty patriotism, and roused the nation to a deeper sense of the glorious heritage bequeathed by those whose dauntless courage and amazing enterprise stand forth as not the least that is admirable in the history of the past.

A practical race needs that the faculty of the imagination be cultivated and developed. Doubtless the march of events is contributing to this end; and the term 'Empire' now means infinitely more than 'Empire' did.

The Colonies are as members to the body. 'There should be no schism in the body; but the members should have the same care one for another. And whether one member suffer, all the members suffer with it; or one member be honoured, all the members rejoice with it.'

If, then, we recall the immeasurable sacrifices entailed upon Great Britain, it need be no matter of surprise if the Secretary of State for the Colonies, having in view the vast colonial interests which are at stake, should foreshadow a scheme which cannot fail to draw the attention of the world to our West Indian possessions. The Chancellor of the Exchequer has consented, the Secretary of State for the Colonies assures us, to propose at the meeting of parliament a very large grant in aid of the West Indies.

This suggested gift will, without doubt, recall to many minds that wonderful exhibition of Christian philanthropy which electrified the world some sixty years ago. The negro was freed—it was by England's gift.

It is, then, of the West Indian descendant of the black African as the slave and as the freedman that we wish to speak.

Whether it were a wise and far-seeing step to take—this freeing of a million slaves without any lengthened period of training in the uses of liberty—may be fairly questioned.

The storm is over now; the hurricane has swept along its course; the waves have long since lost their force, and we can, with a calm dispassionateness re-live the days of an intense, even terrible, enthusiasm.

It is an easy matter to condemn the methods which, in the fervour of a great emotion, were struck out upon the anvil of popular acclaim.

That there were mistakes no one will attempt to deny. They belong to the history of all great movements. Nor is it without interest, in this connection, to study the report recently published by Vice-consul O'Sullivan upon the working of the decree abolishing the legal status of slavery

in the Zanzibar protectorate. The measure, we are reminded, was of 'a cautious and experimental character.' Profiting by the experience of the past, 'the slave was left to take the initiative in claiming his freedom, and the provisions were so framed that any violent social transition, precipitating the ruin of the Arab planters, might be avoided.' Whatever of criticism may be allowed in considering emancipation in the West Indies, we may think to-day, with a pardonable pride, upon England's gift of £20,000,000 as compensation to the slave-owner. It was an act of surpassing generosity, the parallel of which has never been supplied by any other nation.

It was, of course, impossible for any one to say what would happen when the declaration of freedom should be read. A terrible anxiety was on every heart. It could not be otherwise. But at whatever cost the inevitable had come at length. Causes had been steadily at work, the progress of which the planter could no more arrest than he could roll back mighty Niagara with his hands. To discuss those causes adequately would be beyond our scope; we are more concerned with the actual developments, the success or failure of the scheme.

However much was felt the righteousness of the cause and the consequent necessity for action, few, probably, were very sanguine as to the results of so great a measure. Crimes, abuses, excesses—these were thought to be the most likely outcome. Yet, island after island gave to the world the unique spectacle of tranquillity under changes the most radical in the economic conditions of government. It was a sudden leap from thraldom into liberty; and it does infinite credit to a nascent race that, though far from permeated as yet by the benign influences of Christianity, the feeling of thankfulness should have swallowed up all baser thought. It might have been so different.

In the eventful August of 1834 there was no Phrygian pileus handed to the liberated slave, no symbolical act of manumission. There was but a declaration read and the birthday of the race began.

If the difficulties attendant upon emancipation or the hindrances to an advancing civilisation inherent in a down-trodden people afford no adequate plea for a return to the days of enforced labour, neither is the argument of any weight which is heard even to this day—that there are not wanting those who, having tasted the fruits of liberty would yet be willing to return to slavery.

The present writer, during some years of residence amongst the blacks, has known such cases. He has talked with men and women who could expatiate with something like enthusiasm upon the days in which they were, as they said, 'cared for.' They will tell you that they were no gainers by emancipation, that so far as material

and physical comfort are concerned they were better off than now; for, in their old age, their children, too often unconscious of any filial duty, leave them to end their days as best they

That they were better fed is certain. To feed the slave well was a matter of the most obvious self-interest. The black is a great eater, and to get good work out of him he must be fed and cared for—fed certainly—that the planter fully understood.

But, under the best conditions, as found in Barbadoes, the whole life was a woful experience, brightened mainly by food and sleep. The majority of the planters may have been—often were—men of understanding and humanity; but when freed from such salutary hedging as public opinion mercifully affords, it was sufficiently easy to yield to temptations incident to the manage-

ment of great estates worked by slave-labour.

Time was when Christianity and philanthropy alike stood outside many a plantation pleading persistently and patiently for entrance. It was frequently a matter of individual caprice whether or no religious teaching should be even tolerated. Under such conditions progress and development were impossible.

But now, what is that we see? A progress truly remarkable in many ways.

In the half-century and more of freedom the negro has learnt to understand the element in which he lives; has thrown off, to a very appreciable extent, the lower and more debasing laws, and has come to value and aim at the higher—love, truthfulness, manliness.

It would be impossible here, however interesting, to pass under review all that has contributed to make the black what he is to-day. As one studies the West Indian negro the wonder grows, not that so little should have been accomplished, but that such undoubted progress should have been made.

There is little in the bud to give promise of the future glories of the flower. What the bud requires is to see the sun. And surely there was little enough in the stunned and stunted intellect of the negro to give even hint of subsequent expansion. What the race needed was the light. Lord Macaulay says: 'Till men have been some time free they know not how to use their freedom. There is only one cure for the evils which newly-acquired freedom produces, and that cure is freedom.'

It may be well, then, to inquire briefly how far England's gift has proved a blessing and not a curse.

The experiment of free-labour could not be other than a dismal one. Even to-day it is only an indifferent success, if success, indeed, it can be called. The change was a disastrous one for the planters. One by one they left, disheartened and disgusted with the new order of things; nor

have our West Indian islands ever recovered from the shock which Christian philanthropy was constrained to give. Traces there are, and many, of the solidity of the work which used to be accomplished. Such evidences lie in the massive walls and in the sturdy ruins of what once were magnificent structures, and which seem now almost to defy the ravages of time.

The moralist will tell you these are but indications of a former greatness raised by the unrighteous combination of English capital and enforced labour. That is true; but you cannot, nevertheless, but feel, as you look upon them, a certain sadness that the greatness is no more.

But was the change equally disastrous for the negro? We think not. What life-value he has, however, for himself and others, is a question involving problems yet unsolved, both racial and economic.

We have no desire to paint the West India islands as Edens in which flourish only innocence and harmony. We hold no brief for the coloured race; but justice demands that we recognise and foster what is best within it. If we pass it through the moral crucible we must generously accept results where we find them.

And results there are of no mean order.

The educational system has already worked great things. If the standard of attainment is not particularly high, it is, at least, not without surprise that we notice, on visiting the 'coloured schools,' the state of discipline in which the black teacher holds his pupils; the quick intelligence expressed by the ready answer, the general orderliness and sense of requirement displayed. Perhaps the extreme receptivity of the young is the most striking feature. Place side by side white and black children, not beyond the age of twelve years however, and you would find it difficult at times to decide which is the smarter race. Volatile, rapidly maturing, the black is by no means incapable of mental activity. Yet, after such agelimit as we have indicated, the white child forges ahead, never to be overtaken by the black. Up to the present time the negro has shown little aptitude for originating or for self-government. He does best when under guidance—the guidance of a superior race—and probably always will do so. What has been said lately of Africa may still, with equal truth, be said here: 'The brain of Africa is white, the sinews are black.'

Probably no charge is more frequently made against the black than this, that he is lazy. Judged from the standpoint of English energy, it may seem true enough; residence within the tropics should, at least, help to modify the impression. Nature, it must be remembered, in the West Indies has her bounty which militates, to some extent, against undue exertion. Making due allowance for exhausting heat, we may say that the negro, while constitutionally disinclined for labour, is capable of doing average work, and of doing it fairly well.

Of course, when freedom becomes a gift, the power of doing anything, or of not doing anything, needs careful watching, especially in such islands where nature is prolific, and raises no great cry for cultivation. The freed one requires a moral stimulus which shall ensure habitual industry and correct the natural tendency to indolence. Now, clearly, at first there was no such stimulus. The physical cause for labour being removed, the need for a moral cause became imperative. Should it be a matter for surprise if many years must elapse before the lesson could be learnt?

The relationship between master and servant is far from being the sympathetic bond it should be. A spirit of independence, due, in measure, to the reactionary swing of the pendulum, not infrequently engenders trouble and discomfort.

The writer recalls how one day a man came up to see him, bringing a message from his employer, and when the personal answer given was: 'Oh, I will call and see your master about it'—'Master!' was the instant retort; 'I've got no master;' and he went away in a huff. It would, however, be unfair to suppose that such is the general attitude. It was exceptional, and is only mentioned as an example of extreme assertion of independence.

A strange people this with which one had to do; emotional and unstable, it is yet gifted with characteristics which might well call out the best qualities of the stronger and dominant race. Happy, genial, kindly, quickly moved as they are, a stranger would assuredly gather the impression that they were quarrelsome. In reality it is not so. Fond of litigation they may be, chiefly on account of the excitement it imports into lives otherwise dull enough; but violent they certainly are not. Rarely do they come to blows, even when altercation assumes the most threatening

aspect. The writer has frequently watched groups of negroes in such vigorous and excited mood that he has feared for the consequences. Gradually he grew to understand that all this meant nothing. Their moods are evanescent as those of children. Indeed, we may say the race has not as yet outgrown its childhood.

We do not say that the black race can ever take a high position; we do not say that it is a noble race, or one free from grave defects, constitutional and acquired; but with a readiness to accept religious teaching, with a slowly, but surely, advancing morality, with a remarkable abstention from the greater crimes-a race docile and lawabiding, it will repay, and fully, the most careful and sympathetic study. One factor there is which is so remarkable that it would be impossible to overlook it in any estimate of the probable future progress of the black. We refer to the phenomenal fecundity of the negro-phenomenal, viewed in the light of the inexorable law, by virtue of which the weaker races disappear before the stronger. Apparently the negro remains untouched by such a law; and it is this rapid increase of population which cannot fail to arouse most anxious consideration. There are difficulties ahead. The island of Barbadoes, for instance, is the most densely populated part of the earth. With an area of 106,000 acres, it has a population of over 182,000—that is to say, an average of no less than 1104 people to each of its 166 square miles of territory.

It will need all the acumen and resource of the English people to grapple with the present economic conditions, due largely to the unsatisfactory state of the sugar industry. It may be that Great Britain will ere long bestow an added blessing upon what has been so rightly described as 'no mean adjunct of the empire.'

JOHN BURNET OF BARNS.

By John Buchan.

CHAPTER XXI.—HOW MICHAEL VEITCH MET HIS END.



HEN you had gone off,' began Nicol, 'I just waited till I heard your foosteps gang oot o' the yaird. Syne I gaed doonstairs to the landlord, what is a decent, comfortable kind o' man, wi' no'

muckle ill aboot him. I telled him that my maister was terrible unweel, and on no account mann be disturbit, but that he mann hae the room to himsel' for the nicht. The man was verra vexed to hear aboot ye. "Sae young a chiel," says he, "it's awfu'." So I got my will, and I kenned I wad be troubled by nae folk comin' and speirin' aboot the place. There was nae reason why I shouldna gang awa' and leave

the lawin', but I had a kind o' irkin' to get anither glisk o' the sodgers, so I e'en gaed into the room aside them.

'They were noo mair uproarious than afore. Nane were drunk—for, faith, the captain wasna the man to let his men dae that—but a' were geyan wild and carin' little about their language. The captain sits at the heid o' the table sippin' his toddy wi' that dour, stieve face o' his that naething could move, and that ye think wad be ashamed to sae muckle as lauch. But Maister Veitch wasna like him. He was singin' and roarin' wi' the loudest, and takin' great wauchts frae the bowl far mair than was guid for him.

'By-and-by he gets up on his feet.

"A health to the captain," he says. "Drink, lads, to the welfare o' that most valiant soldier and gentleman, Captain Gilbert Burnet. Ye a' ken the errand ye're come on—to lay hands on a rebel and take him to his proper place—and I drink to your guid success in the matter." And he lifts up his glass and spills some o' it ower the table.

'At this there was a great uproar, and they a' rose wi' their glasses and cried on the captain. He sat a' the while wi' a sort o' scornfu' smile on his face, as if he were half-pleased, but thocht little o' the folk that pleased him.

"I thank you," he says at last. "I thank you all, my men, for your goodwill. We have done well together in the past, and we'll do better in time to come. I will prove to the rebel folk o' this land that Gilbert Burnet will make them obey."

"Faith, Gilbert," says Master Veitch, "hae ye no' the grace to speak o' your verra guid friend? I think ye're beholden to me for a

hantle o' your success."

"The captain looks at him wi' a glint o' guid humour. "No more, Michael," says he, "than the cook owes to the scullion. You do my dirty work,"

"Dirty work, quotha," cried Master Veitch, who was hot and flustered with wine. "I wouldna take that from any other than yoursel', Gilbert, and maybe no' from you."

"Take it or not, just as you please," said the captain scornfully. "It's no concern o' mine."

'This angered the other and he spoke up fiercely.

"I am of as guid blood as yourself, Gilbert
Burnet. Is a Tweeddale gentleman no' as guid as
a bit Westland lairdie?"

"Faith, that is too much," says the captain.

"Michael, I'll make you answer for this yet."

So he sat with lowered brows, while Maister

Veitch to a appearance had forgotten the words
he had spoken.

'In a little the captain dismisses the men to their sleeping-quarters, and the pair were left alone save for mysel', whae, being in the dark shadows near the door, escaped the sicht o' a'. The two gentlemen sat at the board eyeing each other with little love. By-and-by Gilbert speaks.

"Ye called me a bit Westland lairdie no' long syne, Master Veitch, if ye'll be remembering."

"The other looks up. "And what if I did?" says he. "Is't no' the fact?"

""That it's no' the fact I have a good mind to

let you see," says the captain.

"Michael looks at him askance. "This is a gey queer way to treat your friends. I've done a' in my power to aid you in a' your pliskies. I've turned clean against the laird o' Barns, who never did me ony ill, a' for the sake o' you. And forbye that, I've done what I could to further your cause wi' my sister, who is none so

well inclined to you. And this is a' the thanks I get for it, Gilbert?"

I saw by the dour face o' the captain that he was mortal thrawn,

"And a' the thanks ye are likely to get," says he. "Is't no' enough that a man o' my birth and fame should be willing to mate wi' one o' your paltry house, a set o' thieves and reivers wi' no claim to honour save the exaltation o' the gallows-rope? Gad, I think it's a mighty favour that I should be so keen to take the lass from among you."

"By Heaven, that is too much to swallow," said Maister Michael, as some sparks o' proper feeling rose in him at last; and he struggled to his feet.

'The captain also rose and looked at him disdainfully.

"What would you do?" said he.

"This," said the other, clean carried wi' anger, and he struck him a ringing lick on the face.

'Gilbert went back a step, and (for his honour I say it) kept his wrath down.

"That's a pity," says he; "that was a bad action o' yours, Michael, as ye'll soon ken. I'll trouble you to draw."

'I hae felt vexed for mony folk in my life, but never for yin sae muckle as puir Maister Veitch. He reddened and stumbled, and plucked his sword from its sheath. He was dazed wi' wine and drowsiness, but his enemy made nocht o' that.

'They crossed swords, and I watched them fall to. I was terrible feared, for I saw fine that the yin was as angry as a bull, the ither as helpless as a sheep. It was against a' decency to let sic a thing gang on, so I ran forrit and cried on them to stop. "D'ye no' see the man's fair helpless," I cried out, but he never seemed to hear me, but went at it as hard as ever.

'At first baith fought nane sae bad, for baith were braw swordsmen, and even in sic a plight Michael's skill didna desert him. Gilbert, too, was quieter than was to be expectit. But of a sudden a wild fury seized him. "I'll teach ye to speak ill o' me and my house," he cries in a voice like thunder, and came on like a storm o' bail

'Michael fell back and did his best to defend himsel'. But the puir lad was sae dazed and foundered that frae the first he had nae chance. His blade wabbled at every gaird, and he never risked a cut. It was just like a laddie gettin' his paiks frae a maister, and keepin' off the clouts wi' yae airm.

'And then he let his sword drop, whether wi' weariness or no' I canna tell, and stood glowerin' afore him. The captain never stopped. I dinna think he ettled it, for when he began I think he didna mean mair than to punish him for his words. But now he lunged clean and true. Nac sword kept it aff, nac coat o' mail wardit it, but deep into Michael's breast it sank. Wi' yae

groan he fell back, and the breath gaed frae his body.

'I could hardly contain mysel' wi' rage and sorrow. At first I was for rinnin' forrit and throttlin' the captain, but I got a glimpse o' his face, and that keepit me. It was dark as a thunder-cl'ud, and regret and unquenched anger lookit oot o' his een.

"This is a black business," he says to himsel'.
"God knows I never meant to kill the fool."
And he began to walk up and down wi' his heid on his breast.

'I felt that I had seen eneuch. My whole heart was sick wi' the pity o' the thing, and forby it was time for me to be going if I was ever to win to Tweedside. So I slips frac the house, which was still quiet, for naebody kenned o' the deed, and far away somewhere I heard the lilt o' a soldier's song. I sped down the Harbour Walk, and syne into Embro', as though the deil were ahint me. When I won to Auchendinny it was aboot three in the morning, and I made a' the haste I could. I think I maun ha'e run a' the road frac there to Leadburn. Then I took ower the Cloich hills and down by Harehope and the Meldons. I

crossed Lyne abune the brig and came down Stobo Burn, and here I am. I never met a soul for good or ill, so the land's quieter thereaways than folk make it oot. But down by the Eddleston Water there's a geyan nest o' sodgers, so ye've nae time to lose, laird, if ye wad win to the hills.'

When I turned to Marjory at the close of this tale she was weeping silently, yet there was little bitterness in her tears. Her brother had, after all, made a better end than one could have guessed from his life. Indeed, I had small cause to feel kindness to him, for he had betrayed his trust, and had been the author of all the ills which had come upon my mistress. But for her sake I was sad.

'Marjory,' I said, 'I have many scores to settle with my cousin, for all his life he has done me ill, and the time will come when I shall pay them. I will add this to the others. Be assured, dear, that your brother shall not be unaverged.'

And Marjory dried her tears, and from that hour spake never a word of Michael. But I knew well that deep in her heart remained an abiding sorrow which chastened the gaiety of her spirits.

COMMERCIAL EDUCATION ABROAD AND AT HOME.

By Principal Grant Ogilvie, Heriot-Watt College, Edinburgh.



E hear much of the excellence of the commercial education provided in other countries, and of the pressing need of our adopting some, at least, of the foreign methods. We have certainly much to learn from Ger-

many, France, and Austria in this matter; and it may be profitable to consider shortly the conditions and arrangements that obtain in these countries.

It is a common remark that on the Continent every relation of life is dominated by the military system. In few relations, however, is this dominance more complete in character and more lasting in its effects than in that of higher education; indeed, it is not too much to say that many institutions for advanced scientific, technical, and commercial education on the Continent owe their success in no small measure to the laws relating to military service. The military training to which all young men are subject is begun by two or three years spent with the colours. But such young men as pass certain examinations, on leaving higher schools of a specified grade, may be enrolled as one-year volunteers, and are posted to the reserve on completing one year of continuous service. The period of study required for the final qualifying examinations in commercial high schools or colleges may be taken as from fifteen to eighteen. These three years of study, however, practically take the place of one or two years' service in the army, and they lead to other military advantages and social distinctions to which in Britain we have no parallel. It is not, then, to be wondered at that all who can in any way afford it continue their education to the required stage.

In this way an artificial stimulus has been given to higher commercial education abroad. But the advantages which this education, in these times of keen struggle for place and position, gives to the individual as well as to the commerce of the country are now so well understood and appreciated that no outside influence would be necessary to maintain the attendance at the higher commercial schools and colleges. On the Continent, as in Britain, the great volume of business is at the present day transacted in offices too large to afford a thorough general training to an apprentice. It has thus become necessary to supplement, in one way or another, the training afforded by practice in a mercantile office. In the Continental high schools the course of instruction for boys, up to the age of fourteen or fifteen, is very much the same whether they are destined for commerce, manufactures, or professions. After that age, however, the pupil pursues a course which, while liberal and educative, makes use of those subjects of instruction which are most likely to enable him to learn his business easily and rapidly. The school aims, not at making the lad a merchant, but at so training him that he will enter upon his career with good prospect of success in it.

One of the oldest schools for higher commercial instruction is the Public Commercial Institute at Leipzig. Each section of its work is well developed, and it may well be taken as typical of the commercial schools on the Continent. The institute is under the control of the Leipzig Chamber of Commerce, and the cost of carrying it on is almost wholly met by fees for tuition. The higher department of the institute affords a three years' course of thirty-six hours' work per week. Pupils must pass an entrance examination in German, French, geography, history, and arithmetic. Throughout their course in the institute they continue to study these subjects, together with English, mathematics, and science. practical subjects-commercial science, law, office work, bookkeeping, and correspondence - find place in the time-tables for the second and third years. The purely commercial subjects, however, do not have the prominence in the German schools which they have in those of France and Austriaa difference due rather to the conditions of the oneyear military service certificate than to the views of the directors of German schools. In this, which we may regard as the central department of the Leipzig Institute, there are from one hundred and fifty to two hundred pupils. The fees for the full courses are from twelve pounds to eighteen pounds per session.

About one hundred other pupils attend for a session what is called the professional course. This course of work is provided for those who have previously obtained the certificate, securing for them the privileges of the one-year military service law, but whose studies had been on other than commercial lines. The curriculum for such students includes English, French, Spanish, commercial legislation, economics, bookkeeping, correspondence, and the study of products. For students of this class who are engaged in offices during the day there is provided a modified one year's course, which requires their attendance only ten hours a week (seven to nine in the morning).

An important section of the work of the Leipzig Institute, and one which represents a development by no means common on the Continent, is the apprentice department. To the classes of this department any apprentice in a Leipzig commercial house may be admitted, but only on the request of the head of the firm with which he is apprenticed. The apprentice course extends over three years. The hours of instruction are: for one division of pupils, from seven to nine in the morning, on five days a week; and for another, from two to four in the afternoon. The fee for this course is four pounds per session.

In the commercial academy of Prague, which may be taken as a typical Austrian commercial school, there are over four hundred students, and these are somewhat older than those in the Leipzig Institute. Most of the pupils in the three years, all-day course are between sixteen

and twenty-one years of age. Here, as in Leipzig, there is a one year's course for older students who have previously received a liberal general education, and who wish to obtain in the shortest possible time such an amount of special commercial knowledge as will prepare them for a position in a business house.

In France there are eleven institutions officially recognised as higher schools of commerce. These are managed by the local Chambers of Commerce, and each school provides a course specially adapted to the requirements of the district from which it draws its pupils. In essential features, however, the programmes of all are alike, and a uniform diploma is given to those students who pass successfully through the course. The examiners for this diploma are nominated by the State, and the diploma carries with it the privilege of the reduction of military service from three years to one. These higher schools of commerce in France date their importance from 1889, when the law was passed which gives official recognition and regulation to their programmes and diplomas.

The course of study for the diploma extends over two years, and pupils are not admitted under sixteen years of age; the ages of most of those in the schools are from seventeen to twenty. It is usual, however, for the schools to carry on a preparatory course of one year's study; this affords an opportunity for intending pupils to bring themselves well into line with the programme for the diploma-course in the higher school. It may be taken that the French boy of sixteen or seventeen enters upon his two years' course of commercial studies with much the same preparation that the English boy has when he leaves school for an office. Let us see, then, how this extension of school-time is utilised. In what may be called the commercial bureau of the school the pupils spend ten or eleven hours a week; here they are instructed in the principles of bookkeeping and accounting, office practice, commercial correspondence, money, weights, and measures of different countries, exchange calculations, and banking. Two hours a week are devoted to handwriting and shorthand.

While these studies may be said to provide in the main a special training for business, the other subjects are no less valuable for the opportunity they afford for liberal culture than they are as a preparation for the many possible relations into which business brings the merchant. They include industrial and commercial geography (three hours a week), history of commerce (one hour), commercial law and economic science (three hours), and modern languages (eight hours). Much attention is devoted to the study of modern languages. English, which is compulsory, has four hours a week given to it; other four hours are devoted to a second language, which may be German or Spanish or Italian or Arabic. In

addition to these subjects, which are common to all the schools, two or three hours a week are spent in each on the study of matters of special importance in the district from which the school draws its pupils.

The general result is that on the Continent those young men of the middle classes who are destined for business enter the merchant's office at about twenty years of age; they are then familiar with commercial history and geography, the money, weights, and measures used in different countries, and with bookkeeping; are able to read, and it may be to speak, one or more foreign languages; and they have at least an elementary knowledge of the machinery of business, economic science, and commercial law.

What now of commercial training in Britain? It is no doubt true that in our offices we afford unrivalled opportunities for much that is essential in the education of the man of business. If, however, these opportunities are not to be thrown away, it is necessary that the clerks to whom they are offered should have such a preliminary training as will enable them to enter into their duties with full intelligence. The majority of British clerks commence their apprenticeship at fifteen or sixteen. Their school course should then be one which will enable them to reach a definite standard at this age. The subjects of instruction should be chosen with a single eye to the preparation for subsequent work in commerce. This does not imply that the school is to aim at being a model office. Far from it. Look at the course suggested by the London Chamber of Commerce, which has been trying for the last ten years to give a lead in this matter. The junior commercial certificate of the Chamber is awarded after an examination in the following subjects: English, arithmetic, a modern foreign language, elementary drawing, elementary science, and two other subjects selected from a list classed as mercantile, linguistic, mathematical, and scientific. This examination is within the reach of well-trained pupils at thirteen or fourteen years of age. No less than three hundred firms in the city of London have stated that they will give a preference in their appointments to applicants holding the certificates which the London Chamber of Commerce issues to those who pass in this junior examination. Surely this is a sufficient indication of the value of a sound preliminary education to a lad who has chosen a business career.

The London Chamber holds also an examination for 'senior commercial certificates.' The subjects of this examination are: English, two modern foreign languages, mathematics, commercial geography and history, elements of political economy, and two of a long list of optional subjects. Such are the subjects which men of business recommend for the later years of a boy's school life and for higher work in evening classes during a clerk's apprenticeship.

It must be confessed that the suggestions and inducements offered by the London Chamber of Commerce have not yet brought forward a large number of candidates for their certificates. It may be, nevertheless, that they have had a considerable influence in guiding teachers and parents in the education of boys who are to go to business.

In Scotland the establishment of 'leaving certificates' given by the Education Department to boys who pass suitable examinations on leaving secondary schools has done much to cultivate a systematic course of study in these schools. Indeed, by a very slight modification of some of these examinations, and by the establishment of a commercial group-certificate, Scotland would be in possession of an excellent preliminary commercial examination. Such a certificate would be in definite relation to a course of instruction in secondary schools which even now leaves but little to be desired. With such a lead, England, too, might look for the early establishment of an efficient general scheme for the commercial sections of its secondary schools.

While we in Britain have been slow to realise what the schoolmaster can do for the merchant in the preliminary stage of commercial education, we have been by no means behind in regard to the second and equally important part of the work. The conditions of life here make it essential that instruction in commercial subjects should be provided in evening classes for clerks during their apprenticeship. Accordingly, we find now in almost every large town good provision of classes for this purpose. The subjects specified in the senior scheme of the London Chamber of Commerce are well represented in the programmes of the great evening schools and colleges-foreign languages, commercial geography and history, machinery of business, commercial and industrial law, mathematics, and science, all draw many evening students in our great commercial centres. Indeed, it is now quite possible for a clerk who has had a good school training to make such advance in his education during his apprenticeship as to bring him at twenty or twenty-one years of age practically abreast of his Continental brother-or shall we say rival? Opinion in the offices is, however, slow to realise the great value of a thorough knowledge of modern languages and of those aspects of commerce for which definite instruction outside the office is required. Yet one has only to look at the groups of subjects that appear in the courses of study of all the Continental schools of commerce to see what studies are found to pay in the long-run. Perhaps before long we may find commercial instinct lead our young clerks to secure for themselves all those advantages of education to which their fellows abroad may almost be said to have been driven by the effects of the military regime under which they live, and by the commercial aspirations of those in power.

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In Scotland the establishment of 'leaving certificates' given by the Education Department to boys who pass suitable examinations on leaving secondary schools has done much to cultivate a systematic course of study in these schools. Indeed, by a very slight modification of some of these examinations, and by the establishment of a commercial group-certificate, Scotland would be in possession of an excellent preliminary commercial examination. Such a certificate would be in definite relation to a course of instruction in secondary schools which even now leaves but little to be desired. With such a lead, England, too, might look for the early establishment of an efficient general scheme for the commercial sections of its secondary schools.

While we in Britain have been slow to realise what the schoolmaster can do for the merchant in the preliminary stage of commercial education, we have been by no means behind in regard to the second and equally important part of the work. The conditions of life here make it essential that instruction in commercial subjects should be provided in evening classes for clerks during their apprenticeship. Accordingly, we find now in almost every large town good provision of classes for this purpose. The subjects specified in the senior scheme of the London Chamber of Commerce are well represented in the programmes of the great evening schools and colleges-foreign languages, commercial geography and history, machinery of business, commercial and industrial law, mathematics, and science, all draw many evening students in our great commercial centres. Indeed, it is now quite possible for a clerk who has had a good school training to make such advance in his education during his apprenticeship as to bring him at twenty or twenty-one years of age practically abreast of his Continental brother-or shall we say rival? Opinion in the offices is, however, slow to realise the great value of a thorough knowledge of modern languages and of those aspects of commerce for which definite instruction outside the office is required. Yet one has only to look at the groups of subjects that appear in the courses of study of all the Continental schools of commerce to see what studies are found to pay in the long-run. Perhaps before long we may find commercial instinct lead our young clerks to secure for themselves all those advantages of education to which their fellows abroad may almost be said to have been driven by the effects of the military régime under which they live, and by the commercial aspirations of those in power.

Meanwhile the subject is not being allowed to rest. The Education Department received notice that an International Conference on Commercial Education would be held at Antwerp in the middle of April, to give an opportunity for the discussion of the curriculum and methods which should be adopted in schools of different grades. Sir J. F. D. Donelly, of the Science and Art Department, has also announced that special inquiry is being made into the nature of the provisions of commercial education of various grades in Paris, Havre, Hamburg, Antwerp, and other cities, the results of which will be given in the next volume of Special Reports on Educational Subjects. Sir John Donelly added: 'Seeing that more than £775,000 a year is at the disposal of local authorities in England and Wales without the exercise of their powers of rating, it seems to the Lords of the Committee of Council on Education that they are in a position to establish and organise commercial schools in the places best adapted for them, and with the most suitable curricula; and it appears to my Lords that the time has not yet arrived when they can properly approach the Treasury with a view of obtaining further special grants for commercial education.'

The third and highest section of the work of commercial education appeals to a limited number, but it is of the greatest importance. For those who are to be our leaders in commerce much can be done by instruction in an educational institution. In France, the 'École des Hautes Études Commerciales' is an institution of university rank, and provides a two years' special course of training for those who are to become merchants or bankers. A building, erected at a cost of over £100,000, for the accommodation of three hundred

students, is a standing demonstration of the estimate which our French neighbours put upon the national value of the instruction which such an institution can afford.

In Britain we have the beginnings of a school for higher commercial studies, 'The London School of Economics and Political Science' is not yet three years old, but it is rapidly making its influence felt among men engaged in business in the metropolis. It is intended not to take the place of but to supplement the training of the office and the market; its classes are therefore, as a rule, held after office hours—say between 6 and 9 p.m. Its curriculum includes a large number of definite applications of economic science to departments of commerce, banking, insurance, railway administration, customs, &c. The school is only a beginning, but it is a beginning of much promise.

There is one feature in the Continental schemes which must not be omitted from this noticethe official recognition of the importance of foreign travel as a part of the education of the young merchant. The governments and Chambers of Commerce abroad give travelling scholarships for the study of foreign commercial conditions. These scholarships are awarded by competition, and are usually tenable for two or three years. The young men who hold them are required to reside in some selected foreign country, to occupy themselves with serious studies, with business, and with commercial journeys. At certain timesgenerally at the end of each year-they have to submit studies of the commerce and industries of the region in which they are living. Who can say that the national and local money spent on these scholarships is not well invested?

A MESSENGER FROM THE DEAD.

By ALAN OSCAR, Author of Captain Kid's Millions, &c.



APTAIN JOHN WHITNEY sat in his cabin at the Liverpool Sailors' Home with a letter before him, the contents of which filled his soul with longing.

'It is the sweetest little girl in the world, dear, and I am getting quite strong already; but I do wish you were here.

'That means I must go straight out by the mail boat,' he said; 'and yet I can't afford to throw away fifteen pounds on a saloon berth, and steerage I won't go. I know! Watkins will give me a passage out.'

The next morning he was in the forecastle of the Allan liner Armenian, outward bound, his acquaintance Watkins, the marine superintendent, having slipped him aboard to work his passage to Halifax, home, love—and fatherhood. In ten days he hoped to see his wife and daughter.

The seamen noticed him directly.

'One of them blooming Novys (Nova Scotians) been over to sell his ship; going back on the cheap,' said Tom.

'Yes,' replied Bill, 'I guess that's about his size.' Which was a good guess of Bill's.

Not being a 'packet rat,' Whitney knew he would have to be his own chum during the passage across, and was content that it should be so; it would give him more time to dream of the greeting awaiting him at Halifax. Thus he rather resented the familiarity of a harmless-looking fellow in the port watch, who came up to him on deck and offered him a chew of tobacco. The man seemed a foreigner.

Whitney took the offered plug with an abrupt 'Thank you, mate,' and turned short on his heel. The other, not a whit offended, shambled off, singing low, 'Mimi Pinsent est une blonde.'

'What's the matter with "softy Vannes"?' asked a man.

'He gave me a chew,' said Whitney.

'Ah! he's not a bad sort, though he is daft. Been sailing back and fore in these here packets this two year past; they do say as he's got any amount of book-l'arning, that same feller.'

'Oh!' said Whitney, and passed on. Vannes, who was said to be a French Canadian, was persistent in his friendly advances, and at last Whitney made some response. To his surprise, he found Vannes intelligent and educated, although a link in his chain of life seemed to have snapped and left him drifting, anchorless. He was a favourite amongst the seamen on account of his simplicity and good nature, and also because he had a fund of French songs, some of which the rough fellows had turned into chantys or hauling choruses, by adding an uncouth burden of their own. One in particular appeared to be a favourite, and in constant use when the topsails were to be hoisted:

> Joliette, ma Joliette-And a hoodah, and a hoodah: Qu'elle est belle, ma Joliette-And a hoodah, hoodah day.

And so forth.

Whitney and Vannes were the only two amongst the seamen who had the least pretence to culture; and the Nova Scotian, softened by the sweet imaginings of the meeting he so eagerly looked forward to, felt himself drawn to this simple fellow who, though in a ship's forecastle, showed by his refinement that he was no common sailor. What he was, or had been, Whitney could not discover; he seemed to have no past, or at least to have no recollection of it. To what might not such a friendship have led? But some wild force willed that it should be brief-little more than 'a look and a voice, then darkness again and silence.'

For the first few days they had strong northeast winds, and were able to keep their square sails set; running thus before a favouring gale, the watch on deck had little to do. Vannes attached himself closely to John Whitney, and seemed to look on him as a sympathetic friend. One evening he came up into the crow's-nest during Whitney's lookout.

'What is it, Frenchy?' Whitney asked. 'You've no business up here, you know.'

'I want to spik with you. 'Av' you a wife, John?'

'Yes.'

'Me also. I think I once did have wife, belle comme une ange, and-I did dream of her to-night. . . . Where is she?'

- 'How should I know, Vannes, my boy?'
- 'I t'ink it means that I meet her up-up in ciel.'
- 'Nonsense! You aren't going to die.'
- 'You think no?'
- 'Of course not.'

'Mon ami,' said Vannes seriously, 'sometimes he who shall die knows better. I do not fear the Bon Dieu-He is one friend of me; and if I have a wife, why should I not go to see her? Do you go to meet your wife?'

'Yes. Frenchy.'

'In ciel?'

'Good heavens! No, Vannes. You make me shiver with such questions. She is in Halifax; and my little girl too.' He spoke with all the father in his voice.

'Ah! Then soon you will see her. I also soon shall see my wife.'

A few hours afterwards the wind shifted suddenly to the north-west, and all hands were turned up hurriedly to shorten sail. The port watch sprang aloft to furl the fore topsail.

Already the night was wild. In the North Atlantic a storm wastes no time; a few hours and a winter gale becomes a hurricane, giving scant time to get sails furled and ship snug. Already the Armenian was plunging wildly into the rising sea, and hurling the spray across her forecastle in heavy showers. The ship rolled and wallowed along, driven by the great panting heart low down in her iron body. Up there on the yards it was no child's-play to get hold of the great slattering topsails in the thick darkness. Men howled directions to one another, working madly the while on the swaving footropes, their bodies bent over the yard, their arms clutching at the wildly bellying sails.

Vannes and Whitney were out on the lee yardarm; they could not see each other in the black night; conversation was impossible in the teeth of the roaring wind.

At last the sail was secured and the gaskets passed.

'Come on, Frenchy!' roared Whitney. 'Let's lay down out of this.' There was no answer.

'Vannes,' he cried, 'come on !'

'Frenchy ain't here,' yelled an answering voice. 'It's me-Bill Yawl!'

'I thought it was the Frenchman,' answered Whitney as he descended, with the rest of the watch, to the deck.

In such a night a man is not missed. But day came, and Vannes was gone.

'I knew he was alongside of me last night, on that topsail-yard,' said Whitney. 'He must have fallen from aloft. Poor chap! I wonder if he did receive warning of death? I've heard of such things,' he thought. 'I wonder if I shall know beforehand when my time comes to die? If my dear Margaret was dead would her spirit come and tell me?-Heavens! what am I thinking about?' and he roughly shook his tremors from him. But poor Vannes's sudden death had laid a hold on his spirit, and he could not altogether throw aside his gloom.

Five nights later John Whitney again sat alone, a broken man. He had reached Halifax to find the young mother and her baby beneath the snow-covered earth. At first he had blindly cursed in his utter despair; now, at last, he was slowly waking to manhood again, and trying to look forward to the long, solitary years which he must dree alone. His intense, passionate longing for the dead woman had led him to wild extravagances; in the secrecy of his room he had called upon her, in mad whispers, to come back to him from her grave—only for one moment, for one word; but there was no answering voice, no dim spirit-shape.

The other occupants of the house had long since retired, the mistress with a caution to him about the gas. For he had taken refuge in a boarding-house, utterly unable to face the solitude of his own place. The hours struck one after another, and still found him sitting there. Twelve—one—two—three—

'Oh Margaret! if I could only speak one word to you, dear; one word to know that you are still alive—somewhere; one word to tell me that I shall meet you again. Why! I could go through the rest of it alone then. My darling girl! I've heard of people coming back like that. Can you not come? Perhaps you can see me sitting here alone. Come, dear! Come! Only for one?

He suddenly stopped his wild prayer. The door of his room had opened noiselessly; a dim light shone in. Another moment and he had risen, staggering to his feet. Had his cries been answered? In the doorway stood a beautiful young woman, clothed in white, who carried in her hand a curiously-shaped lamp which gave forth a peculiar bluish light.

'Margaret!' he whispered wildly, 'is it indeed you?' But the vision made no sign. 'Margaret, my love! Are you so changed? Does heaven, then, alter one's face? Oh, my dear, speak to me!' and he held out imploring hands from where he stood, afraid to move. But the apparition answered not, and stayed there staring with vacant eyes. Then, even as he would have moved forward, it noiselessly glided away. He sank gasping into his chair.

'Was it she? How altered! My dear wife was not so beautiful. Is that the heavenly change? I had rather have seen her earthly face; this one was like a stranger to me.'

But the experience had been too much for him; he felt faint, and walking unsteadily to his bedroom, flung himself prone. Nature asserted her rights; he fell into a deep sleep.

Mrs Herault, the proprietress of the 'Colonial' boarding-house, was getting uneasy about her friend

Captain Whitney; it was now three in the afternoon, and though Amanda had more than once knocked at the door of his bedroom, there had been no answer.

'Poor fellow!' said Mrs Herault, 'I hope the loss of his wife has not deranged him.' She was beginning to fear that Whitney had taken his life, and was imagining the possibility of her other boarders taking flight. 'He must be waked,' she said decisively, and went up herself to his room. Perhaps her summons was more forcible than Amanda's; perhaps he had slept his sleep. She was answered, and a burden of fearful possibility was lifted from her mind. She waited for him as he came downstairs, and carried him off to her private sitting-room.

'See now, my friend,' she said, 'you will stay and drink tea. What is it, then? Come; be a man. She will not like to look down and see you thus.'

'She has seen me, Mrs Herault,' he answered, in such a voice that she again took fright.

'Come, Captain Whitney, have a little sense.'

'It is true,' he said solemnly.

She saw he was all shaken, and that he had something to tell her. She kept silence, and Whitney told of his night's experience.

'And she did not speak?' asked Mrs Herault when he had ended. Such a vision seemed quite possible and likely to her, for she was a 'spiritualist,' as so many of her countrywomen are.

'Not a word,' answered Whitney.
'And you could see her face plainly?

'Well—yes. I thought I could. But yet she was changed. Her hair was gold; it used to be black, as you know. And she was not so tall as Margaret—but perhaps that was the white robe.'

Mrs Herault started. All at once her spiritualistic romance faded to nothing.

'What is it?' he said, for he noticed her change of countenance.

'Shall I tell him?' she asked herself. His staring eyes and tremulous repeated question decided her.

'Listen, mon ami! It was not your Margaret.'

'Ah, yes, it was. I shall never forget her glorified face. And she had the white robe that people say they have up there.'

'Stop, my dear friend, I beseech you! Be tranquil. I will tell you the secret.'

At that moment a voice was heard somewhere within the house singing:

'Monsieur Biron veut danser!
Sa culotte fait apporter;
Sa culotte
A la mode.'

'Who's that?' he asked. 'That was one of poor Vanues's songs.'

'Vannes!' she cried. 'You knew Vannes! Ah! what can this mean! Dites donc, where is he, this Vannes? What mystery is this?'

'Vannes is dead,' said Whitney.

'Dead! Ciel! You say so? Mon Dieu!' The voice approached:

> 'Sa perruque Jusqu'à la nuque, Ses souliers tout ronds, Eh bien, dansez, Biron!'

Mrs Herault sprang to her feet.

'Listen, my friend,' said she, putting her hand on Whitney's shoulder. 'Be prepared. Be strong.' The door opened. His vision of the past night

appeared! He sat staring, gasping. He would have spoken, but words refused to come.

'Ah, ma tante,' cried the vision; then, seeing Whitney, paused and said, 'Oh! I thought you were alone,' and was about to retire.

'Stop, Dorine,' said Mrs Herault; 'you have already made the acquaintance of monsieur.'

The young woman looked at him curiously, a blush surging up in her cheeks till all was rosy.

'No,' she said; 'I have not his acquaintance; then she turned and fled. Whitney started to his feet and would have followed her.

'Stay,' said Mrs Herault. 'Sit down. You are

now satisfied that she is not your wife.'
'Yes,' answered Whitney. 'And yet'—
The midnight encounter with this beautiful vision, at a time when all his soul longed for his dead wife, had filled him with a special interest in this lovely woman, whoever she might be.

Who is she, then?' he asked.

'The wife of your friend Vannes.'
'The wife of Vannes!' he repeated in wonder. But-Mrs Herault, he was out of his mind; he thought his wife was dead. He had a prevision that he was going to meet her in heaven.'

'Poor fellow!' said Mrs Herault. 'Listen while I tell you their story. He was a man in good position, a civil engineer, but very fond of the sea. Dorine is my dead brother's daughter; he was a sea captain. Vannes was with him on a voyage to Cape Breton when they first met. They became very fond of one another, and he asked for her hand. But she was only a young girl. However, he would not be denied. On their wedding-day-it is now three years ago-he met with an accident, and had to be taken to the hospital. There was an operation. The doctors said his brain might be affected, but there were

no signs of it, and he was getting rapidly well, when, one day, he disappeared, and we have never seen him since. The shock made Dorine very ill, and when at last she recovered we found that she was liable to attacks of sleep-walking. Sometimes after these attacks she confessed to me that Vannes had spoken to her in dreams, and she has had the belief that some day she would actually meet him in one of these sleeps, for she never believed that he was dead. She has said nothing to me about her attack of last night, but it is no wonder that she blushes and runs away.'

'I should like to tell her about her husband,' said Whitney.

'She will scarcely face you just yet,' answered Mrs Herault.

This proved to be true; Dorine did not again

appear that day.

Dwelling on the lovely midnight vision and the romantic circumstances of the case, Whitney's thoughts were drawn from his dear dead ones to this new excitement. It was two days ere Dorine Vannes could be persuaded to face him; then, at last, they met. Both felt that, already, they were on more than ordinary terms of intimacy; mutual interests attracted them. He observed her with some curiosity, trying to imagine a likeness to his dead Margaret. And though the golden-brown hair and deep-gray eyes were not hers, still his imagination, willing to see resemblance, found it. He told her of the death of Vannes, which brought her tears; he also told her of his own bereavement.

Here, then, they were, both bereft of their dear ones. A common grief drew them to each other. To Whitney this was a mercy. To her, who had never in truth been a wife, and who had outlived the shock attendant on her loss, it seemed an opportunity for pitying consolation.

And so it happened that, when, presently, Whitney had again to go to sea, they were more than friends, though no word other than of friendship had been spoken between them.

He was away six months. Then once again they sat face to face. His eyes asked the question he would put. Hers dropped at the challenge.

'How can I take her place?' she said.

'You took it that night when you came to me at my call,' he answered. 'She could not come. She sent you.'

LIGHT RAILWAYS FOR INDIA.



view of the enormous sums the government has to pay for transport of troops and stores on Indian frontier expeditions, and the awful mortality of baggage animals, it seems certain that the laying down

of light railways in these regions would save money in the long-run. In the Indian Empire itself during peace-time light railways have over and over again proved of the greatest benefit to trade and commerce, and it is surprising that the authorities do not encourage their general adoption in congested districts, and where larger sums than a light railway would cost are often spent on the make and up-keep of roads. A civil engineer writes to an Indian contemporary

that the general ignorance of not only lay but also of professional men on the carrying capacity of light railways on thirty-pound rails is marvellous. There is a light railway of two feet six inches gauge now working in the Deccan which puts to shame the antiquated stock of the standard gauge lines. This railway has recently carried a boiler weighing fourteen tons on an ordinary low-sided wagon. Forty other wagons were lying in the yard. The high-sided wagons of the company, with a bare weight of five tons seven hundredweight, carrying a load of fourteen tons thirteen hundredweight, are specially constructed for the carriage of heavy ordnance, and are bullet-proof. A similar line and similar stock with Sir William Lockhart's force would have saved the government lakhs of rupees in the past year in transport, and it is a great pity that such light railways are not better known and better appreciated in India. The haulage powers of this light railway in the Deccan are, on a level, straight line, one thousand and thirty-six tons; on a gradient of one in ninety, with a curve of six hundred feet, two hundred and forty-five tons. The lower-class carriage is forty feet long, and constructed to carry with ease sixty-four passengers. It is satisfactory to hear that all the rolling stock of the Deccan light railway was supplied by English firms. The transport difficulty on the north-west frontier is well illustrated by what happened in the case of the column which had to be served last. They naturally had the remnant. The animals were in most cases so small that it was found impossible to fit them with government saddles. Donkeys from Sind and hill ponies all the way from Darjeeling were collected at Peshawar in October; and when these animals have to be brought in some instances about fifteen hundred miles with their drivers, the cost of transport may be imagined. An elephant battery is with one of the columns. In ten days the elephants of the battery would devour four hundred and eighty mule-loads of fodder; whilst, in addition, elephants daily require chupatties, made of flour, to keep them in health.

That light railways pay their way well in the East is shown by the Darjeeling and Himalaya Railway, and another small venture in private hands in Burma. The former, though the cost of construction was heavy, as it connects a popular hill-station seven thousand feet high with the plains, pays a dividend of ten per cent. The line in Burma is a short one of only eight miles in the Tenasserim division, but its earnings, with a small line of steam-launches connecting Maulmain with Thaton, the headquarter station of a large district covered with fertile paddyfields, during the past three years has yielded thirty-

six per cent. profit to its proprietors.

With all these facts before them, the government of India and the different local governments of the various provinces should encourage by all means in their power the opening out of the country by the construction of light railways.

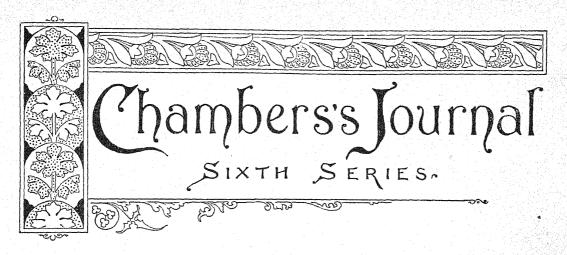
funds are available, districts should be encouraged to construct railways themselves. Where funds are scanty, English firms might well be asked to tender for the work, land and every reasonable facility being given to the constructors. By calling for such tenders by advertisement in the Indian press and in English professional papers, the government of India would be doing a vast deal of good to the empire committed to their charge, whilst at the same time this might easily afford remunerative employment for millions of capital seeking investment in England. Such lines of light railway would, we believe, pay a dividend in most places in the East nearer ten per cent. per annum than five. The government might well undertake to guarantee three per cent, while the line was under construction, and to share equally with the contractors in any dividend that might be earned over, say, four per cent. per annum. Such terms would, we believe, be satisfactory to European capitalists, whilst they would in no way embarrass the revenues of the government of India, guarantees being given for the construction of the lines within a certain time. Eventually, we believe, the government of India would be large gainers, not only by their share in dividends over four per cent., but in the great impetus which would be given to trade and agriculture by cheap and speedy transport. In times of scarcity or famine in one district, food could be quickly and easily transported in as many hours as it took days to transport it in the recent famine. Such lines would also mean increased comfort in living to the poorest classes of India, who are now, even in ordinary years, often reduced to a single meal a day, whilst one hundred miles away there may be comparative plenty. Light railways are therefore, we consider, one of the first necessities of the day in India. and we trust those in power will do all that they can to bring about their extension by the means we have suggested. Before the close of the century we might have at least one thousand miles of such lines in India, to the advantage of both the rulers and the ruled.

SPRING IN EXILE.

THE Spring is here! and far-off England wears Its tenderest, freshest garlands on her brow. My home-sick heart turns back to England now, Ah! small would be my share of haunting fears If I could stand upon a good ship's prow And scent the bursting heather as she clears The homeward bar: instead, a mist of tears Blots out the blush upon the hawthorn bough.

'Tis only through the eyes of memory That I can see the yellow primrose-beds, The cowslips in the meadow by the sea, The golden light that the laburnum sheds, Or crystal margins, near whose purity The slender daffodils uplift their heads.

MARY PAGE BIRD.



SOME NOTABILITIES AT PLAY.



HE happiest and healthiest men are those who have one or more hobbies; and that person is to be pitied who cannot relax and find change and enjoyment in another groove than that which

forms the main employment of his life. It is also perfectly evident that what forms a pleasurable recreation to one man may only prove another form of work to his fellow. Dr Livingstone once expressed regret that he did not play more with his children when they were growing up around him, as they soon sprang up in his absence, and left him conscious that he had none to play with. Hugh Miller found genuine recreation and objects of endless study and delight in a sandstone quarry. Charles Dickens, after a heavy spell of work at one of his serials, would fly off at a tangent, and walk until he was like to drop; or he would engage with Forster to meet at a country inn and dine hilariously. 'I am become incapable of rest,' he once said to Forster when remonstrated with. 'I am quite confident I should rust, break, and die if I spared myself.' He did not spare himself, and so dropped down in harness. Carlyle was often in the Chelsea 'bus when busy with his Frederick; he rather enjoyed the 'shaking' of the vehicle as wholesome exercise, and believed he had ridden twice round the world when so engaged. Sir Richard Tangye has found recreation and enjoyment in the collection of relics of Oliver Cromwell; while Lord Armstrong has spent many a happy hour in planning for the planting, building, and the making of roads in and around his noble estate of Cragside, at Rothbury, and has thus found recreation from his more serious work at Elswick.

Quite a number of notable persons have been obliging enough to tell Mr Douglas Sladen, the editor of the invaluable biographical handbook Who's Who (A. & C. Black), something about their favourite recreations. The result is often both astonishing and amusing, while always interesting. For instance,

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Mr Toole finds his recreation in 'the exercise of his profession;' the favourite recreation of Sir Henry Irving is acting, that of George MacDonald preaching, and of Sir Walter Besant 'looking on.' The author of All Sorts and Conditions of Men has indeed looked on to some purpose. Lord Salisbury does not condescend to give his recreations; but those of Lord Roberts are hunting and cycling, and of General Sir Evelyn Wood hunting, shooting, and lawn-tennis. Dr Smiles at eighty-six confesses to being too old for recreation; but we know that he has had his own day of it in travelling here and there, hunting up facts and interviewing many persons on behalf of his small library of industrial heroes. Mr Ruskin, when a boy, was driven by his father over the finest parts of England and Scotland, and in later life found both work and recreation in drawing, writing, and travelling, and setting the world right in its political economy. Mr Gladstone and Mr Goschen both find their recreation in literature; although the form it takes with the late Prime Minister would be called study by most men. He saturates his mind to repletion from one book, and then flies to another. Tree-felling is not always in season, of course.

We may be permitted to remark, without disrespect to our authority Who's Who, that, having attained its fiftieth year, it has grown somewhat stouter, and ever more serviceable, with the addition of new lists of editors of newspapers and magazines, and over a thousand more biographies. No word is wasted in these biographies, or shall we call them autobiographies? Facts only are given without any comment, the tail-end of the article giving the recreation of the subject under notice, with his address and the club or clubs with which he is connected. A ramble over its pages has furnished us with much useful information as well as with the recreation of many of our prominent public men; and since a man shows his character quite as plainly in play as in work, these facts have an autobiographical interest.

instance, We wonder how far Lady Aberdeen is joking [All Rights Reserved.] APRIL 9, 1898.

when she tells us that for recreation she takes a great interest in everything connected with Ireland. This surely says much for her goodness of heart, as the Irish Question in the House of Commons means serious business indeed, and is generally looked upon as a wet blanket. Dr Adler, chief Rabbi of the United Hebrew Congregation, finds enjoyment in arranging and completing his library of Oriental history. Canon Ainger, our best authority on Charles Lamb, of course finds his recreation in literature. The Duke of Argyll has found amusement and instruction in geological studies, natural history, and painting; while Dr Alfred Russel Wallace enjoys chess and gardening. The inventor of 'Bovril,' Mr J. Lawson Johnston, spends three months of the year in shooting and yachting in Scotland; while Mr E. T. Hooley recreates himself in yachting.

Sir Edwin Arnold, happier than most newspaper editors, has varied his duties on the Daily Telegraph by shooting, yachting, cycling, and travelling in the East. Mr Buckle of the Times finds his recreation in golf; so do 'Ian Maclaren' and Dr W. Robertson Nicoll of the British Weekly, Only, the latter must find it difficult to say where work ends and recreation begins, if we consider his other labours in connection with the Woman at Home, Expositor, Bookman, and many volumes continually dropping from the press. Mr C. A. Cooper of the Scotsman, like his predecessor, Alexander Russel, affects angling and books; Mr H. W. Massingham of the Daily Chronicle engages in golf, cricket, and fishing; while his joint-editor, Mr Henry Norman, has many strings to his bow, such as shooting, fishing, riding, cycling, farming, and photography; Mr J. St Loe Strachey of the Spectator practises cycling; Mr A. C. Harmsworth enjoys cycling, angling, and travel; Sir T. Wemyss Reid, general manager of Cassell & Co. and editor of the Speaker, has recourse to travel and conversation, when he can get them.

Mr F. C. Burnand, editor of Punch, finds more Happy Thoughts in riding and music; Sir Joseph Norman Lockyer believes in tennis and golf. As Mr C. K. Shorter does not enlighten the public about his recreations, we must suppose that editing weekly periodicals, such as the Illustrated London News and the Sketch, with the English Illustrated and editions of English classics thrown in, are probably included. Mr J. A. Spender of the Westminster Gazette finds his recreation in cycling; Mr Max Pemberton indulges in riding, cycling, and golf; while Mr W. T. Stead enjoys cycling, boating, and playing with children. Mr Douglas Sladen, editor of Who's Who, has forgotten one important item in the list of his own recreations -that is, the editing and preparation of this volume, which must have been a labour of love; otherwise his list contains other forms of industry, such as rifle-shooting, Rugby football, golf, travel, architecture, and curio-collecting.

No one will be surprised to hear that Mr

William Black's favourite recreation is salmonfishing. Mr Thomas Hardy delights in arboriculture, cycling, and architecture, which was his first love; Mr Meredith, a great pedestrian in earlier days, now finds enjoyment in reading French literature; and Mr James Payn in whist. Miss Braddon loves music and literature, and Mr Hall Caine horse-riding and mountaineering. Mr Quiller-Couch believes in yachting and rowing; Dr A. Conan Doyle enjoys golf, cricket, and eyeling; and Mr Stanley Weyman riding and cycling. Dr Blake Odgers finds his recreation in reading the works of these two before-mentioned novelists. Mr Rider Haggard varies novel-writing with gardening, fishing, shooting, and cycling; Mr Guy Boothby loves riding, driving, cycling, and the collection of live fish from all parts of the world. It is evident from every page of the writings of Mr John Buchan, author of John Burnet of Barns, that he is fond, as he says, of the open air and out-of-door recreations, such as golf, cycling, climbing, and angling. Mr Henty indulges in rowing and yachting; Mr Manville Fenn loves travel, gardening, and natural science; Mr Barrie likes a good game of cricket, and indeed all out-of-door games; while Mr Crockett had 'anciently' a love for cricket, now mountaineering, cycling, and golf are more to his mind. Mrs Molesworth has found recreation in weaving her pleasant stories for young people; and Mrs Ritchie (Miss Thackeray) finds enjoyment in riding, fresh air, pictures, and good company.

Mr Andrew Lang loves cricket and golf andas one who was born within sight of Ettrick and Tweed-angling; Mr Augustine Birrell indulges in walking, golf, and book-hunting, as all readers of his Obiter Dicta might be well assured. Mr Jerome has a fondness for riding, driving, and cycling, and Mr Swinburne for swimming. Mr E. W. Hornung, Mr H. G. Wells, Mr Le Gallienne, Mr T. P. O'Connor, and many others set down cycling as their favourite pastime, to which Mr Rudyard Kipling adds fishing. To this list we may add the name of M. Zola, although his opportunities for the pastime of cycling in the near future promise to be limited. Mr Zangwill, on the other hand, likes all forms of locomotion save the 'bike.' To Dr W. W. Skeat belongs the honour of having been the first Cambridge professor to ride a bicycle. Nobody need ask what Mr W. G. Grace enjoys most, but to his favourite cricket we must add bengling; and General Booth has no recreation save travelling in connection with the Salvation Army.

We give these as but samples of the rest. Depend upon it—and we end as we began—a man away from the main business of life without one, or several, hobbies may prove but a dull dog to live with or spend a holiday alongside; and all the examples which Mr Douglas Sladen has

enabled us to give are better and not worse men because of their recreations. They are probably healthier, and do better work into the bargain; which means a great deal in the struggle and stress of modern life. That is to say, if these recreations do not themselves become the main business of life, or are so engaged in as not to bore other people. It matters little what the occupation of one's by-hours may be, whether the sawing of wood or the planting of cabbages—provided one gets the necessary change and recreation. When the hobby provides relaxation and helps on the main business of life at the same time, so much the better.

JOHN BURNET OF BARNS.

CHAPTER XXII.-I CLAIM A PROMISE, AND WE SEEK THE HILLS.



ND now I set myself resolutely to think out something that might be the saving of my life and my love. I was in a perilous case; for when Gilbert found that I had escaped him he would come on forthwith

to Dawyck, and in all likelihood be here ere nightfall. One thing was clear—that I could not bide myself nor leave Marjory to the tender mercies of our pursuers. The hills for me; and for her—ah, that was the rub in the matter!

At last I made out some semblance of a plan. On the edge of Douglasdale, in the shire of Lanark, dwelt William Veitch, at the house of Smitwood, the uncle of the dead Sir John, an old man well fallen in the vale of years. He was unmolested by all, being a peaceable soldier who had served God and the king in his day, and now thought of nothing save making a good ending. He would gladly take the lass, I knew, and shelter her till such time as I should come and take her again. Nor would Gilbert follow her thither, for no word should come to his ear of her destined harbour, and he knew nought of the place or the relationship. The plan came upon me with such convincing force that I took no other thought on the matter. Nicol should be left there, both as a guard of the place—and who so vigilant?-and as some means of communication between me and my mistress. For my own part, when once I had seen my lass safely sheltered, I should take to the hills with a light heart. I should love to be free and careless among the wide moors, and try my wits in a fair contest against my sweet cousin.

I told the thing to Nicol, and he gladly agreed. Then I sought out Marjory, who had gone to make some preparations for my flight, and found her talking gravely to the old man, the only remaining servant. I drew her to the little oak parlour.

'Marjory, lass,' I said, 'I am but new come home, and I little thought to have to take flight again so soon. Do you mind, ere I went to the Low Countries, I came here to bid you farewell, and you sang me a song?'

'I mind it well,' said she.

'Have you a remembrance of the air, my dear? How did it go?' and I whistled a stave.
'Ay, even so. You have a good ear, John.'

'Ay, even so. You have a good ear, John.'
'I think, too, that I have mind of a verse or so,' said I. 'There was one which ran like this:

Oh, if he were a soldier gay,
And tarried from the town,
And sought in wars, through death and sears,
To win for him renown,
I'd place his colours in my breast
And ride by moor and lea,
And win his side, there to abide,
And bear him company.

Was it not so?'

'Yes,' she said, smiling. 'How well you remember, John!'

'And there was a refrain, too,' I went on:

'Forscoth, a maid, all unafraid, Should by her lover be, With wile and art to cheer his heart And bear him company.'

Marjory blushed. 'Why do you remind me of my old song?' she said. 'It pains me, for I used to sing it ere the trouble came upon us, and when we were all as happy as the day was long.'

Nay,' I said, 'it is a song for the time of trouble. It was your promise to me, and I have come to claim its fulfilment. I am for the hills, Marjory, and I cannot leave you behind. Will you come and bear me company? I will take you to Smitwood, where even the devil and my cousin Gilbert could not follow you. There you will be safe till I come again when this evil time is past, for pass it must. And I will go to the hills with a blithe heart if once I knew you were in good keeping.'

'O John, to be sure I will follow you,' she said, 'even to the world's end. I will fare among rough hills and bogs if I may but be near you. But I will go to Smitwood, for most terribly I dread this place.'

So it was all brought to a conclusion, and it but remained to make ready with all speed and seek the uplands.

It was, I think, about three hours after mid-

day when we were ready to start on our journey. A strange cavalcade we formed: Marjory on her roan, dressed plainly as for the hills, and with a basket slung across the saddle-bow for all the world like a tinker's pannier; I myself on Maisie, well mounted and armed; and Nicol on foot, lean and ill-clad as ever. It was not without a pang that we set out, for it is hard to leave the fair and settled dwellings of home for haphazard lodging among rough morasses. Marjory in especial could scarce refrain from tears; while I own that, as I looked down the vale and saw the woods of Barns and the green hills of Manor, I could have found it in me to be despondent.

Soon we left the woods and came out on the heathery brow of Scrape, and crossing it, entered the deep glen where the burn of Scrape flows to join the Powsail. The heather had been burned, as is the custom here in the early spring, and great clouds of fine white dust rose beneath the hoofs of our horses. A dry crackling of twigs and the strident creak of the larger roots as they grated on one another filled our ears. Then once more we ascended, high and ever higher, over rocks and treacherous green well-eyes and great spaces of red fern, till we gained the brow of the hill which they call Glenstivon Dod, and looked down into the little glen of Powsail.

We crossed the lovely burn of Powsail, which is the most beautiful of all Tweedside burns, since the water is like sapphire and emerald and topaz, flashing in every ray like a myriad jewels. Here we watered our horses, and once more took the hills. And now we were on the wild ridge of upland which heads the glens of Stanhope and Hopecarton and Polmood, the watershed 'twixt the vales of Tweed and Yarrow. Thence the sight is scarce to be matched, to my knowledge, in the south country of Scotland. An endless stretching of hills, shoulder rising o'er shoulder, while ever and again some giant lifts himself clean above his fellows, and all the while in the glen at our feet Tweed winding and murmuring.

I asked Nicol what was the purpose of our journey, for this was by no means the shortest way to Douglasdale and Smitwood. He answered that to go straight to our destination would be to run our heads into the lion's mouth. He purposed that we should go up the Tweed to a hiding-place which he knew of on the Cor Water, and then make over by the upper waters of the Clyde and the Abington moors to the house of Smitwood. These were the more deserted and least accessible places, whereas the villages and lowlands around the skirts of the hills were watched like the High Street of Edinburgh.

In a little we passed the wild trough where the Stanhope Burn flows toward the Tweed. It was now drawing toward the darkening, and the deep black glen seemed dark as the nether pit. Marjory grew frightened, as I knew by the tightened clutch at her horse's rein and her ever seeking

to draw nearer me; but, like the brave lass that she was, she breathed never a word of it. Every now and then an owl would swoop close to our faces or a great curlew dart out of the night with its shrill scream, and vanish again into the dark. It was an uncanny place at that hour, and one little to be sought by those who love comfort and peace. But the very difficulty of the way gladdened us, for it gave us assurance that we would be unmolested by wayfaring dragoons. By-and-by stars came out and the moon rose, glorious and full as on the night before when I had ridden from Leith. Then it served to light my course to Dawyck, now to guide me from it.

We were now descending a steep hillside, all rough with 'sklidders,' and came to the Water of Talla, which we forded at a shallow a little below the wild waterfall called Talla Linns. Even there we could hear the roar of the cataract, and an awesome thing it was in that lonely place. But we tarried not a minute, but urged our horses up a desperate ravine till once more we were on the crest of the hills. And now a different land was around us. Far to the right, where the Talla joins the Tweed, we could mark the few lights of the little village of Tweedsmuir. The higher hills had been left behind, and we were on a wide expanse of little ridges and moor which the people of Tweedside call 'The Muirs,' and which extends from the upper Clyde waters to the source of the Annan and the monstrous hills which line its course.

Soon we came to a narrow upland valley, walled with green, precipitous hills. Here Nicol halted.

'There'll be watchers aboot,' he said, 'and our coming 'ill ha'e been tellt to the folk in the cave. We'd better gang warily.' So we turned our horses up the glen, riding along the narrow strip of meadow land beside the burn. I had heard of the place before, and I knew it for the Cor Water, a stream famous for trout, and at this time no less renowned among the hill-men as a hiding-place. For in the steep craigs and screes there were many caves and holes where one might lie hid for months.

Soon we came to a steep green bank, and here we drew rein. Nicol whistled on his fingers, with a peculiar piercing note like a whaup's cry. It was answered by another from the near neighbourhood. Again Nicol whistled with a different pitch, and this time a figure came out as from the hillside and spoke.

'What are ye,' he said, 'that come here, and what do ye seek? If ye come in the Lord's name, welcome and a night's lodging await ye. If no', fire and a sword.'

'I'm Nicol Plenderleith,' said my servant, 'as weel ye ken, John Laidlaw. And these are twae gentlefolk, whose names are no' convenient to be mentioned here, for hillsides ha'e ears. If ye come near I'll whisper it in your lug.'

The man approached and appeared well satisfied. He bade us dismount and led the horses off, while we waited. Then he returned, and bidding us follow, led the way up a steep gully which scarred the hillside. In a little he stopped at an outjutting rock, and crept round the corner of it. At the side next the hill was an opening large enough to allow a man of ordinary stature to pass, and here he entered and motioned us to follow.

CHAPTER XXIII. -THE CAVE OF THE COR WATER.



HE place we found ourselves in was a narrow passage, very lofty and very dark, and with countless jags of rough stone on all sides to affront the stranger.

Some few paces led us into a wider place, lit by some opening on the hillside, for a gleam as of pale moonlight was all about it. There stood a sentinel, a tall, grave man, dressed in coarse homespun, and brown of the face. Through this again we passed into another straitened place, which in a little opened into a chamber of some magnitude.

When I grew accustomed to the candle-light I made out that it was a natural cave in the whinstone rocks, maybe thirty feet in height, square in shape, and not less than thirty feet long. The black sides were rough and crusted, and hung in many parts with articles of household gear and warlike arms. But the place was less notable than the people who were sitting there and greeted us as we entered. In the midst was a table of rough-hewn wood, whereon lay the remnants of a meal. Lit pine-staves cast an eerie glow over all things, and in the light I saw the faces of the company clearly.

On a settle of stone covered with a sheep's fleece sat an old man, large of limb and tall, but bent and enfeebled with age. His long lyart hair fell down almost to his shoulders; his features as the light fell upon them were strong, but his eyes were sightless and dull as stone. He had a great stick in his hand, which he leaned on, and at our entrance he had risen and stared before him into vacancy, conscious of some new presence, but powerless to tell of it. Near him, along by the table-side, were two men of almost like age-square, well-knit fellows with the tanned faces of hill-men. I guessed them to be shepherds or folk of that sort who had fled to this common refuge. Beyond these again stood a tall, slim man of a more polished exterior than the rest: his attitude had something of grace in it, and his face and bearing proclaimed him of better birth. Forby, there were one or two more, gaunt, sallow folk, such as I had learned to know as the extreme religionists. These were busy conversing together with bowed heads and earnest voices, and took no heed of our arrival. To add to all, there were two women,

one with a little child, clearly the wives of the shepherds.

Our guide went forward to the man who stood by the wall and whispered something to him. In an instant he came to us, and, bowing to Marjory, bade us welcome.

'We are glad to see you here, Master Burnet,' said he. 'I am rejoiced to see the gentlemen of the land coming forth on the side of the Covenant. It is you and such as you that we need, and we are blithe to give you shelter here as long as you care to bide with us. It is a queer thing that two men of the same house should be engaged in this business on different sides.'

Here one of the others spoke up.

'I trust, Master Burnet, ye have brought us good news from the Lowlands. We heard that ye had great converse with the godly there, and we will be glad to hear your account of how the guid cause prospers over the water.'

Now I felt myself in a position of much discomfort. The cause of my outlawry had clearly got abroad; and here was I credited with being a zealous religionist and a great man among the Scots exiles in Holland; whereas, as I have already said, I cared little for these things, being not of a temper which finds delight in little differences of creed or details of ecclesiastical government, but caring little in what way a man may worship his Maker. Indeed, to this day, while I can see the advantage of having fixed rites and a Church established, I see little use in making a pother about any deviation. So I now found myself in an unpleasing predicament. I must avow my utter ignorance of such matters and my worldly motives for thus seeking shelter, and in all likelihood win the disfavour of these folk-nay, even be not suffered to remain.

'I thank you for your welcome,' said I; 'but I must hasten to set matters right between us. I am not of your party, though it is my misfortune to have to seek safety among the hills. It is true I have been in the Low Countries; but it was for the purposes of study and seeing the world, and not for the sake of religion. If I must speak the truth, when I abode there I had little care of such things, for they were never in my way. Now that I am returned and find myself a fugitive, I am not a whit more concerned with them. My misfortunes arise from the guile of a kinsman and not from my faith. So there you have my predicament.'

I made the declaration crudely and roughly, for the necessity was urgent upon me of making it very plain at the outset. Another man would have been repelled or angered, but this man had the penetration to see through my mask of callousness that I was not ill-disposed to his cause.

'It is no matter,' he said. 'Though you were the most rabid malignant, we would yet give you shelter. And indeed, though you may not be of our way of thinking in all matters, yet I doubt not you are with us on the essentials. Forby, you are a gentleman of Tweeddale, and it would be queer if you werena right-hearted, Master John Burnet.'

One of the disputants grumbled, but the others seemed heartily to share in this opinion; and bidding us sit down, they removed our travelling gear and set food before us. Our appetite was sharp with the long hill-journey, and we were not slow in getting to supper. Meanwhile the long man to whom we had first spoken busied himself with serving us, for in that desert place every man was his own servant. Afterwards Marjory went to the women, and soon won their liking, for the heart would be hard indeed which was not moved by her pretty ways and graces.

When I had done I sat down on the settle with the rest, and the fire which burned in a corner of the cave was made up, and soon the place was less dismal, but a thousandfold more fantastic. I could scarce keep from thinking that it was all a dream; that my landing, and midnight ride, and Nicol's news, and my perilous predicament were all figments of the brain. I was too tired to have any anxiety, for I would have you remember that I had ridden all the night and most of the day without a wink of sleep, besides having just come off a sea voyage. My eyelids drooped, and I was constantly sinking off into a doze. The whole place tended to drowsiness-the shadows and the light, the low hum of talk, the heavy air, for the outlet for smoke was but narrow. But the man I have spoken of came and sat down beside me, and would engage me in talk.

'I do not think you know me, Master Burnet,' said he, 'but I knew your father well, and our houses used to be well acquaint. I am one o' the Carnwath Lockharts, that ye may ha'e heard o'. My name is Francis Lockhart o' the Beltyne.'

I knew him whenever he uttered the words, for I had often heard tell of him for a gallant gentleman who had seen service under Gustavus and in many Low Country wars. I complimented myself on his acquaintance, which kindness he proceeded to repay. So we fell to discussing many things-men I had known in Leyden, men I had known in Tweeddale, together with the more momentous question of the future of each of us. I gave him a full account of my recent fortunes, so that he might have wherewith to contradict any rumours as to my reasons for taking to the hills. He in turn spoke to me of his life and his sorrow at the fate of his land. The man spoke in such unfeigned grief, and likewise with such a gentleman-like note of fairness, that I felt myself drawn to him. It was while thus engaged that he spoke a word which brought upon him the condemnation of some of the others.

'Oh,' said he, 'I would that some way might be found to redd up that weary times and set the king richt on his throne; for I canna but believe that in this matter loyalty and religion go hand-in-hand, and that were James Stuart but free from his wanchancy advisers there would be less talk of persecuting.'

At this one of the others, a dark man from the West, spoke up sharply: 'What do I hear, Maister Lockhart? It's no' by ony goodwill to James Stuart that we can hope to set things richt in that dark times. Rather let our mouths be filled with psalms and our hands with the sword-hilt, and let us teach the wanton and the scorner what manner o' men are bred by the Covenant and the Word.'

The speech was hateful to me, and yet as I looked in the dark, rugged face of the man I could not keep from liking it. Here at any rate was a soul of iron. My heart stirred at his words, and I could have found it in me to cast in my lot even with such as these, and bide the bent with nought but a good sword and faith in God. Then the old man, he whom I have spoken of, beckoned to me with his staff and bade me come and sit by him.

'Ye kenna me, John Burnet; but weel ken I you. Often in the auld days your father and me had gey ploys hunting and feelting roond a' the muirs o' Tweed. He was a guid man, was Gilbert, and I hear he had glimpses o' grace in the hinner end.'

'Maybe,' said I, being in perplexity, for from the grace that he spoke of my father had ever been far.

'Ay, and I was sair vexed I saw him so little. For he had to bide at hame for the last years, and I was aye busied wi' other work. Yeddie o' the Linns was never an idle man, and less than ever in that days.'

At the mention of his name a flood of recollection came in upon me. I minded how I had heard of the son of Lord Fairley, a great soldier who had won high renown in the wars abroad; and how he had returned a melancholy man, weighed down with the grave cares of religion, and gone to the wilds of Tweed, to a hut just above the Linns of Talla, where he spent his days in prayer and meditation. The name of Yeddie o' the Linns, as he was called among the shepherds and folk of these parts, became an equivalent for high-hearted devotion. Then, when the wars began, tales of him grew over the country-side. In stature he was all but gigantic, famed over half the towns of France for feats of strength, and no evil living had impaired his might. So at the outbreak of the persecution he had been a terror to the soldiers who harried these parts. The tale ran of the four men whom he slew single-handed at the Linns, hemming them in at a nook of rocks, and how often he had succoured fugitives and prisoners, coming like an old lion from the hills, and returning no one knew whither. There was also the tale of his blinding by a chance splinter from a bullet-shot, and how he had lived among the caves and hills, dangerous even in his affliction. Had I but known it, this cave was his finding, and half the retreats in Tweeddale and Clydesdale were known to him. But now he was an old man, who had long left his youth, and his strength had all but gone from him. He sat alone in his great darkness, speaking little to the inmates or the chance-comers, save when he knew them for gentlemen of birth; for though he might risk his life for the common people, he had no care to associate with them, being of the old Kirkpatricks of that Ilk, as proud a house as is to be found in the land.

'You are not of us,' he said suddenly. 'I heard you say a moment agone that you had no share in the inheritance of Jacob, but still chose to dwell among the tents of sin.'

'Nay,' I said very gently, for he was very old and of noble presence, 'do not speak thus. Surely it is no sin to live at peace in the good earth in honour and uprightness, and let all nice matters of doctrine go by, esteeming it of more importance to be a good man and true than a subtle disquisitioner—thinking, too, that all such things are of little moment, and change from age to age, and that to concern one's self much with them is to follow vain trifles. For the root of the whole matter is a simple thing on which all men are agreed; but the appurtenances are many, and to me at least of such small significance that I care for them not at all. I do not mind how a man worship his Maker, if he have but real devoutness. I do not care how a church is governed if the folk in it are in very truth God's people.'

'You speak well, my son,' said he, 'and at

one time I should have gone with you. Nor do I set any great value by doctrine. But you are young, and the blood is still rich in your veins, and the world seems a fair place, with many brave things to be achieved. But I am old and have seen the folly of all things-how love is only a delusion, and honour a catchword, and loyalty a mockery. As the things of earth slip away from me and the glory of my strength departs, I see more clearly the exceeding greatness of the things of God. And as my eyes cease to be set on earth, I see more nearly the light of that better country which is an heavenly. So I love to bide in these dark moors where the pomp of the world comes not, among men of grave conversation, for I have leisure and a fitting place to meditate upon the things to come.'

'It may be,' said I, 'that some day I also be of your way of thinking. At present the world, though the devil is more loose in it than I love, seems to me so excellent that I would pluck the heart of it before I condemn it. But God grant that I may never lose sight of the beauty of His kingdom.'

'Amen to that,' said the old man very reverently.'

Truly my thoughts on things were changing. Here was I in the very stronghold of the fanaties, and the two chief—the old man and Master Lockhart—I found men of reasonable mind and lofty purpose. And thus I have ever found it, that the better sort of the Covenanters were the very cream of Scots gentlefolk, and that 'twas only in the canaille that the gloomy passion of fanatics was to be found.

Meantime Nicol, who cared for none of these things, was teaching the child how to play at the cat's garterns.

THE PHONOGRAPHIC TEACHER.

NEW DEVELOPMENTS.



MOVEMENT is on foot for bringing in the phonograph as an aid to the teaching of foreign languages. It is not by any means a new idea, though it is only recently that it has been practi-

cally taken up. When Edison invented this modern marvel he foresaw that it would be available for this purpose, though a good many years have passed without the suggestion he then made having been adopted. From the moment the possibility of recording and repeating sound was practically demonstrated it was obvious that something like a royal road to the learning of languages had been opened, and not only that, but that a very important aid to the teaching of instrumental music and singing had also been introduced.

The time seems to have come when these practical developments of the invention may be expected on a considerable scale. The phonograph is not likely now altogether to supersede the living teacher either of music or languages where the living teacher is available; but it may to a very important extent supplement and assist the teacher, and in a good many cases where good personal instruction cannot be had it may be an extremely useful substitute. There are, for instance, many persons living in villages and remote country houses who would be glad to learn French or German or Italian, but who are deterred from doing so by the difficulty of getting teachers who can impart to them the proper pronunciation. Translation, grammar, idioms, and so forth may be gained from books; but for the power to speak a

foreign language it is necessary to hear it spoken by the tongue of a native, and an educated native.

Now this is just what the phonograph may be made to afford. Most persons by this time know what the instrument is. Edison found that the vibrations produced by sound could be made to record themselves on a revolving cylinder of smooth, hard wax, by means of a small point attached to a tympanum. The tympanum vibrated, and the little point scratched marks upon the wax as it went round. The sound made the vibrations, and the vibrations made the marks; and it was found that by reversing the process the marks would make the vibrations and the vibrations would make the sound - no matter what the sound might be. It might be the words and the nasal twang of the Yankee, the gutturals of the German or Russian, the mellifluous periods of the Frenchman or Italian, an organ or pianoforte performance, the accompaniment and solo of a prima donna, or the outburst of applause which follows it. When the cylinder has received its impression, whatever it may be, it may be stored away. Whenever it is desired it may be slipped into position on the phonograph, and the mere touching of a switch sets the mechanism in motion and brings forth the sound-not, it is true, quite so clear and distinct as the original sound, but sufficiently so for all the practical purposes of teaching. It is easy to conceive of many of the purposes to which the thing may be put. A young lady in a remote country house has, we will suppose, a new piece of music which she cannot quite master or about the best rendering of which she is not quite sure. She wishes to know how the best executants would interpret it. If she has a phonograph at hand, it may shortly be quite possible for her to write to her musicseller and request him to send her Grieg's or Paderewski's rendering of the piece. By return of post she may get a little box perhaps six inches long and three inches square, containing the cylinder. She will merely unpack it, slip it on to the phonograph, put the ends of two tubes into her ears, and touch a button, and immediately Grieg or Paderewski will be playing to her the piece she has been studying. And they will play over and over and over again, if she wishes it. If it is a full volume of sound, it may be heard clear and strong from a funnel or trumpet, and without the assistance of the eartubes. It will not be altogether the pure, bright tones of the Broadwood or Erard that the great players are seated at; there is a certain resonant twang which further developments may possibly overcome, but which at present detracts somewhat from the enjoyment of it as music; but as a means of studying the niceties of style, of execution, of light and shade and expression, it is practically just as good as having the actual performers. It is a literal and infallible reproduction of their playing.

And the same may be done in the case of a song. Any one wishing to know how a Patti or a Santley would render a given passage may summon these distinguished vocalists—assuming, of course, that their rendering has thus been stereotyped—and may set them singing just as often and as long as may be required.

The only objection to this that it is easy to conceive is, that it will tend to make musicians mere imitators instead of encouraging them to express their own feelings and ideas in their own individual way. In the use of the phonograph for the learning of a language not even this objection can be raised, for the less individuality an Englishman can introduce into his articulation and pronunciation of his French or German the better. He can learn to speak and to understand a foreign tongue only by dint of constant repetition and imitation, and the phonograph is just the thing to give him this. A series of carefully devised lessons are being prepared, and these are spoken into the phonograph with the utmost clearness and precision. The student may then take each spoken lesson away on a cylinder, and in the privacy of his own room may have an educated Parisian Frenchman or a Berlin German to go over it with him just as many hours a day as he thinks proper. As with the music, it cannot be said that the reproduction by the cylinder is as clear and distinct as the original voice. It requires close attention—at any rate by the unpractised ear; but it may perhaps be said to be as distinct as ordinary speech appears to a foreigner, and the student who can readily make out the voice of the phonograph will have little difficulty in understanding the living speaker.

And what, it may be asked, is likely to be the cost of studying a language, or instrumental music, or singing by this method? No very precise answer can be given to this at present. A phonograph complete costs not much under £40 to purchase outright, but comparatively few students would want to buy the thing. They will be content to hire, and this, it seems, may be done for about £10 a year. The wax cylinders, blank, cost about a shilling apiece. What may be the price of them when they have been enriched by music or speech must obviously depend upon the value the musician or the speaker may be able to get for service rendered. For linguistic purposes this need not be very exorbitant, and a cylinder with a good lesson engraved upon its shining surface ought to be had for half-a-crown. Two new cylinders a week for a month would thus, with the hire of the instrument, cost thirtyfive shillings. Lessons, of course, may usually be had for less than this, but then it must be remembered that the phonographic teacher is entirely at the disposal of the pupil for the whole of his time if he chooses. There is, indeed, a limit to the durability of the waxen impression on the cylinder. The little vibrating point cannot go indefinitely over and over the same lines without affecting them. But a lesson, it is said, may be repeated for some hundreds of times without appreciably impairing its clearness, and the probability is that the patience of the scholar will wear out before the mechanical instructor. The graven wax will certainly retain its teaching power until the fee per hour has been brought indefinitely lower than that of the ordinary living teacher, and, unless the pupil is phenomenally slow in apprehension, the lesson may be learned and the wax roll laid aside in safe keeping with its powers practically unimpaired, and ready, it may be, to be brought out by-and-by for another generation of students.

The new and cheaper phonograph which has just been put upon the market may work even a greater revolution. It weighs less than nine

pounds, clockwork takes the place of the electric motor, and from £41, 10s. the price has been reduced to five guineas, although up to twelve guineas can be paid for larger machines. On the five-guinea machine the speeches and songs of celebrities can be reproduced with effect to a drawing-room or even to a larger audience. Another important development is that Edison has invented a machine by which from one cylinder on to which a great speaker or singer has spoken or sung, the number can be indefinitely multiplied without in any way losing the characteristics of the original. Each cylinder can contain from half to three-quarters of a newspaper column of matter, and in the case of the new musical phonograph the cylinders will be capable of taking the whole score of an opera, for ordinary purposes they can be bought for less than a shilling, and they can be used for fifty or sixty different speeches or songs.

'SANTA ANNA.'

CHAPTER II.



HE awful discovery laid bare by Manders naturally turned the attention of those interested in the direction of Lord Maplehurst. Manders had troubled nothing about the sale of the alleged 'Santa Anna.'

He did not ask why his commission came. The doings of the dealers interested him not at all so long as he was paid; and both Roscoe and Hunt saw the wisdom of keeping the fraud between themselves and Manders for the time.

That the picture was a copy Manders proved beyond a demonstration. He really had discovered the secret of the lost colours. Nobody without the knowledge could have painted a picture like that substituted for the genuine canvas. Roscoe was not so utterly prostrate with grief that he failed to turn this discovery to account.

True, the swindle might have cost his partner and himself £20,000; but it would be well laid out if they could procure from Manders the formula for the production of those marvellous colours. Manders admitted that his media were comparatively cheap to manufacture.

At the same time he declined to sell. He did not want money, he said; no true artist ever did. Some day or another the public might have a lucid interval; they might come to appreciate the genius of Manders, and then his knowledge of colours would enable him to go down to posterity as the Father of the New Renaissance. With a sigh of regret, Roscoe abandoned the contest—for the present.

The thing to do now was to get at Lord Maplehurst. Doubtless this impecunious nobleman had been tempted to crime; and doubtless—when the matter was explained to him in a reasonable light, by a detective—he would disgorge the ill-gotten plunder. This view was shared by the private inquiry agent employed by Hunt & Roscoe. For the present they decided to keep clear of Scotland Yard.

Mr Shorter, of Leadenhall Street, was quite ready to take up the case. There were prospects of large fees in it, to say nothing of a personal journey to Pau to see Lord Maplehurst, if it proved necessary. The little man with the soft voice and the greedy mouth demanded £100 down, and got it; after which he went away, and nothing was heard of him for a week, when he came sidling into the Piccadilly establishment.

'You have news for us?' Roscoe asked eagerly.
'Oh yes,' said Shorter. 'I have been to Maplehurst Castle; and the first thing I hear is that his lordship has not been in England for fifteen months.'

'But Baron Brantano saw him at South-ampton.'

'Well, there is something in that. Any way, his lordship has not been near his family property, and his lawyer assures me that he has not been in England. Indeed, there are reasons why he cannot return.'

'We know of one of them,' Hunt remarked

'We think so,' responded the more cautious Shorter. 'The lawyer's explanation involves nothing criminally wrong. When Lord Maplehurst was last at home he fell in love with a young lady, a ward in Chancery and heiress to a huge fortune. The trustees opposed the match, and the Court supported them. Lord

Maplehurst solved the matter by running away with the young lady and marrying her. There is a warrant out for his arrest for contempt of court. This means at least six weeks in Holloway Jail unless the lawyers can settle the matter—a fearful punishment for a young man who is passionately addicted to field sports and an outdoor life generally. Now you understand.'

'He'll have to come back now,' said Roscoe.

'Of course. They couldn't arrest him on the present charge. But if you swore an information it would be a different thing.'

'No, no,' Hunt cried; 'for heaven's sake let us have no publicity! You shall go and see his lordship, Shorter, and point out the error of his ways. You say his wife has plenty of money. I don't ask you to compound a felony, but if we could see our money back we should be satisfied.'

'Quite so,' said Roscoe; 'and as to the picture?'

'The picture was removed from the Castle by Lord Maplehurst's secretary,' Shorter explained. 'It used to hang in the library, and I saw the place whence it was taken a week or two ago by the properly accredited agent. He brought a letter from Lord Maplehurst to the housekeeper, who allowed it to depart upon those instructions. I have traced it to Southampton.'

There was no more to be said after this, and Shorter received his orders to proceed to Pau and interview the author of all the mischief without delay. Little holidays at other people's expense relieved the fatigue of Shorter's business. He prophesied a speedy return with the money or its equivalent in value. Hunt & Roscoe accepted these assurances with chastened satisfaction.

"I don't feel very sanguine,' Roscoe remarked after their visitor had departed. 'This chap is evidently a cunning rascal, and you can see now why he got Manders to make a copy of the "Santa Anna." He could sell the picture twice over by using the forgery, and there was a big chance also that the forgery would never be discovered. The real picture would be buried in the Vatican—unless the thief kept it for a third experiment—and nobody would know it was there, at least nobody in our world. And there you are, Hunt.'

'But why that forged telegram?' Hunt suggested.

"Well, there, I confess you have me,' Roscoe replied. 'For the present we can only grin and bear it in silence. I don't believe that the picture in our safe at present is the one we purchased. It looks so different now, some way. How it was done or by what black art I can't say, but I believe that the genuine article has been substituted in lieu of the forgery.'

At that moment an assistant entered the office. 'Lord Manningham to see one of you, sir,' he said. 'He's come about the Leonardo da Vinci. I said the picture was not here.'

The partners grouned. Lord Manningham was

one of their best customers, a nobleman of unlimited means, who counted no cost where his fancy was concerned. Suppose he wanted to purchase the 'Santa Anna.'

As a matter of fact, this was exactly what the earl required. His corrugated face puckered into a smile as the partners advanced to him.

'So you got the picture, eh?' he squeaked in his falsetto, a little cracked in the upper register. 'If I could have got to the sale you wouldn't. Did your people arrange for my train to be late?'

'We deeply regret your absence, my lord,' Roscoe murmured.

The speaker had never made a more veracious statement in his life. He did indeed deeply deplore the absence of his noble patron.

'Oh, I dare say,' Lord Manningham laughed.
'No getting over you people. But come, I am all anxiety to see the picture.'

Roscoe remarked that the precious treasure was at the bank, which was a fiction, and that it was past banking hours, which was perfectly true. Lord Manningham professed his profound disappointment.

'Then I will come at this time the day after to-morrow,' he said. 'I may be able to come to-morrow afternoon, in which case you had better have the picture ready. And don't be too grasping in the way of profit.'

His diminutive lordship departed with the consciousness that his visit must have caused a deal of satisfaction to the partners. But it was not exactly joy that was apparent in their hearts. They were clad in gloom as in a garment,

Here was a nice state of things. They dared not sell the 'Santa Anna' to Manningham as genuine; they were equally averse to confessing how cruelly they had been deceived.

'What in the name of fate shall we do?' Hunt groaned.

Roseoe laughed. Then he too fell into a sombre vein. For a long time he sat gazing at his blotting-pad. A light suddenly flashed into his eyes.

'I have it,' he cried; 'indeed, there is no other way out of the mess.'

He bent over the table and whispered eagerly in Hunt's ear. The latter looked dubious, then more cheerful. Finally he went so far as to smile.

'It shall be done,' he said; 'I leave it entirely to you.'

Unconscious of the snares entangled by fate about his feet, Lord Maplehurst was making the best of life at Pau. He had a villa there, and though the place was more or less out of season, Maplehurst had no complaint to make on that score.

He even entertained no grudge against the Court of Chancery. So long as those people came to their senses before the hunting season commenced, there was no reason why all should not be forgotten and forgiven.

Meanwhile Maplehurst was completely happy with his dolce far niente and his charming wife. It is not every day that a man marries beauty and wealth, and Maplehurst had done both. He was genuinely in love with his wife, and she with him; his creditors, evidently anxious to cast no cloud athwart the long honeymoon, had like one man ceased from troubling, and all was peace.

There was nothing of the criminal about Maplehurst as he lounged in the garden of his villa that perfect August morning, perusing his letters. He had a cigarette between his white teeth, and his curly head rested against the hammock-chair in which his wife was reclining.

A handsome young man enough, with a face bronzed and varnished over the ruddy glow, and eyes as bright as stars. He looked like one who owes a great deal more to his saddler and gunmaker than to his eigar and wine merchant, which was indeed the case.

Lady Maplehurst's lips were parted in a smile. Evidently the letter in her hand afforded her considerable amusement. Maplehurst, deep in his own correspondence, did not notice this till he felt his ear pulled. Wives of peers of the realm are very like the wives of other people in this respect.

'Are you listening, or are you not?' the lady

'I beg your pardon, Hilda,' quoth Maplehurst.
'This is the rummest thing I ever—— But I'll explain presently. Go on.'

It's from Lucy,' said Lady Maplehurst. 'She was dining at Meldrum the other night, and she met the Lord Chancellor'—

'Fatuous old ass,' Maplehurst said sotto voce.

'On the contrary, Lucy says he was very nice. And what do you think she did? Why, she mentioned our case to him; and he said we were very foolish not to come home. He intimated that things could be made all right, and that if Lucy liked to drop us a hint she might do so. What do you think of it?'

But Maplehurst was hidden in his Times.

'Hullo,' said he; 'so they sold the "Santa Anna," which only fetched £20,000 after all. Jim has gained nothing by the delay. And, by Jove! Brantano has got it, all the same. "We understand the picture has passed into the possession of Baron Brantano, the South African millionaire." Wonder what the dealers made out of it; and I wonder why Pearson has not written to tell me this, since he had the business in hand.'

Lady Maplehurst was deep in her letter again. At the same time a servant came down the garden with a card on a tray. On the card, in modestly small letters, was the name of James Shorter.

'I'll be there in a minute,' said his lordship.
'I say, Hilda, I suppose this is not what Sam Weller would call a confidential pal of the Chancellorship's? No emissary of the outraged majesty of the law?'

Lady Maplehurst laughed merrily.

'Absurd,' she said. 'Hasn't your lawyer assured you over and over again that you can't be touched so long as you are out of England. I shall begin to think you are a coward presently.'

The listener shook his head solemnly.

'I'm not,' he responded. 'But being penned up would be the death of me. I dare say it's only some beggar of a creditor after all.'

With which consolation Maplehurst strolled leisurely towards the house. There was at any rate nothing very formidable looking about Mr Shorter.

'Lord Maplehurst, I believe?' said the latter.

'That's me,' came the Arcadian reply. 'Look here, it's no use for you to bother me about money. I hope to be back in England in the autumn.'

'My visit has nothing whatever to do with money,' Shorter cut in. 'It is a far more serious matter than that, my lord.'

'You don't mean to say that the Court of Chancery'-

'I have nothing whatever to do with the Court of Chancery. I have come from England to see you about a certain picture called the "Santa Anna." A little time back you called upon Messrs Forrest with the painting and ordered them to sell the same. In due course they did so, and handed the proceeds over to you."

'All wrong,' Maplehurst exclaimed. 'I have not been in England for ages. As to the "Santa Anna," I will tell you the exact facts of the case. The painting was left by my mother to my brother James Maplehurst and myself. My brother is in business in Kimberley, and a shrewd fellow he is. Before he went away it was arranged that if he saw a really good opening for the investment of capital he was to cable meto sell the "Santa Anna" and send him his shareof the proceeds. The opportunity has come, and he wants the money. He wrote me that this Brantano would buy the picture, and my secretary, Pearson, negotiated with the Baron. The thing hung for so long that I decided to sell the picture, as James was pressing, and I sent Pearson to England to settle the thing. And I see by the Times that the matter is completed.'

'Oh yes,' Shorter smiled. 'I am a detective, I may say. This Pearson, whoever he is'—

'A man of most respectable family; with mefor three years, and, beyond the signing of cheques, he transacted all my business. I had such confidence in him that he signed my letters even.'

'I dare say,' Shorter said dryly. 'Only the picture passed over by Forrest's people to my clients, the purchasers, turns out to be a rank forgery. And the real picture was disposed of the day after the public auction to Baron Brantano, who was first sounded by yourself, to see if he was ignorant of the affair.'

'Who told you this fable?'

'The Baron himself. I had the facts from his own lips. You met him at Southampton, and exchanged the picture for notes—£21,000 worth. And you were also personally paid by Forrest on the day the "Santa Anna" was sold.'

Maplehurst felt cold. It began to dawn upon him that his immaculate secretary had robbed him of the priceless painting. He was filled with

anger.

'Well, this beats everything,' Maplehurst muttered. 'I am quite prepared to prove that I was not at Southampton at the time mentioned. I can't understand it.'

Shorter deliberated for a moment. That the other was telling the truth was patent at a glance. Evidently this unknown quantity, Pearson, was the figure to seek.

'My Iord,' said Shorter, 'did you negotiate with the Baron direct?'

'We did, and we didn't. Pearson opened up with him; but as to the value and the monetary part, we took a dealer and expert into the business.'

Oo you happen to remember the name of this man ?

'Oh yes. His name is Moss, and he has a place in Piccadilly. But when we found that my brother wanted the cash and our man wouldn't come to our price, I followed Pearson's advice, and let him go to England to realise without delay.'

And you wired your brother what you were

doing?'

Of course. His opportunity out there could not stand idle indefinitely?

Shorter smiled behind his hand. Quite by accident he had stumbled on a valuable clue. Whoever the real culprit was—Pearson presumably—Moss was the guiding spirit. By that cunning telegram he had lured Hunt & Roscoe into the net, and, again, his knowledge of these negotiations was invaluable in eking out a fraud. And yet Hunt & Roscoe had purchased the real picture—of that he felt certain. How, then, was it so contrived that they were placed in possession of the copy?

Shorter almost jumped from his seat with the magnetism of a startling discovery. Moss lived next to Hunt & Roscoe; the premises had at one time been one, surely.

Then with a violent effort Shorter calmed himself.

'You say you had an interview with the Baron?' Maplehurst was saying, his voice coming to Shorter out of a kind of mist.

'Yes, my lord,' the latter stammered.

'Very good. Then I suppose you did not fail to ask him what the pseudo peer was like. It was a safe game in any case, as my face is so unfamiliar in England.'

'I did not omit to ask the question, my lord, Baron Brantano gave me a good description. He outlined a very gentlemanly, fair man of about your age. He had a pointed beard and moustache, and a thin, hooked nose. His manners were excellent. A portion off one of his front teeth.'

'Got him,' Maplehurst cried; 'that's my model secretary, Pearson. He was with me for three years, and a better servant no man could wish for. He knew all my business and all my friends. It was perfectly safe for him. Three months ago he left my service, telling me he had come into some money, and intended marrying and settling down. He was to settle the matter of the picture first, however. Fancy him treating me like this! All the time he was with me I don't believe I ever troubled over a business letter.'

'Depend upon it, this Pearson is the culprit,' Shorter replied. 'In any case, I am afraid I must trouble you to return to England, my lord.'

'I suppose it is necessary,' said Maplehurst, with a wry face. 'I'll come. And if ill befalls me, my blood be on your head.'

Lady Maplehurst had no such fears. Truth to tell, she regarded the whole affair in the light of a huge joke. Perhaps, also, she had faith in the blandishments of her sister Lucy where the Lord Chancellor was concerned. Doubtless she had founded her impressions of that great personage upon recollections of *Iolanthe*.

Any way, a few hours later saw the whole party steaming back to England. Shorter contented himself with a third-class coupé, consoled by the reflection that Hunt & Roscoe would be charged for a first in his little bill. So far the detective had no reason to be dissatisfied with his investigations; and the case looked like lasting a long time yet.

In due course Dover was reached, and Lady Maplehurst began to feel that life's joys were not so hollow after all. Later on husband and wife found themselves dining cosily in a private room at Limmer's Hotel, and listening to the raucous cries of the newsboys below.

'How familiar it all seems!' said Maplehurst.
'By the way, pass that evening paper, Hilda. The autumn handicaps. . . . Hullo! Listen to this.'

And Maplehurst proceeded to read as follows:

'DARING BURGLARY IN PICCADILLY.

DISAPPEARANCE OF AN HISTORIC PICTURE.

Last night an audacious robbery took place at Messrs Hunt & Roscoe's shop in Piccadilly. The thieves entered the premises and succeeded in getting away with the famous Leonardo da Vinci, the 'Santa Anna,' recently purchased for £20,000. The picture was cut clean from the frame, nothing else appearing to have been touched. Up to the time of going to press no further particulars have transpired.'

Lord Maplehurst looked at his wife for a moment in blank astonishment. When would these strauge complications end? And what did all the mystery mean?

A TRIP IN A TORPEDO-BOAT DESTROYER.



HAD rather a novel and interesting experience the other day.

Being in town, on sick leave from my regiment in India, with nothing to do, and lots of time to do it in, whilst eating my dinner

at my club and vaguely wondering how on earth to spend that portion of the next twenty-four hours which was not night, I suddenly remembered that one of my old school-chums was in the navy, and furthermore that the last time he had written me he had mentioned that he was in command of one of the torpedo-boat destroyers belonging to the instructional flotilla at Chatham.

I hadn't his letter by me, and I was not at all certain whether it was Chatham or Sheerness, not being at all well up in things naval; but still, when I went to bed that night I registered a vow that, as time was weighing heavily upon me, the next morning I should seek for Vincent somewhere in the Medway; which vow I kept, as, rising early, after breakfast I went down to Chatham, drove to the dockyard gates, and, being young and innocent, dismissed my cab.

On inquiry at the Chatham dock-gates as to whether H.M.S. Fury was in the port, I had the good luck to be told, 'Yes, sir; you will find her down at the South Lock. It's rather a long way, sir, and she's going out this forenoon.'

Within half-an-hour, and after some uneasy experiences over dockyard cobbles, I came within sight of the Fury. She certainly was not pretty; but her great length and narrow beam gave me the impression that her speed must be very great; whilst her sloping forecastle, the twelve-pounder gun on top of the fore-bridge, her other guns distributed about the deck, her torpedo-tubes, and, above all, her three large funnels, filled me with the idea that she had power in her to strike, if need be, and that she would be a formidable, or at least dangerous, implement in the hands of daring officers and well-trained men.

She was painted black all over, with the exception of a white line around her just under her upper deck.

Going on board, a bluejacket, who turned out to be the quartermaster, stopped me at the gangway and asked what I wished. I gave him my card, and inquired if the captain was on board.

'Yes, sir,' he said. 'Please follow me.'
I did so, but very gingerly, being in constant fear of tripping over valve-guards, eye-bolts, stays, &c. (these names I found out later on), with which the deck was covered, so that just as I got aft up came my old chum from below.

'Hullo, old fellow!' said he, with surprise showing all over his sunburnt face; 'I never expected to see you down here. Come down below and tell me all about it.'

He disappeared down the hatch, so I followed

cautiously. It was just as well I did so, for at the bottom of the ladder gaped a large square hole, in the centre of which was the upper half of a man's body, whom I nearly kicked.

'Oh, they're only getting up the rum,' said Vincent. 'Come in.'

I didn't like these man-traps at all, and I told him so; but I went in, and found myself in a very cosy, square room, about four yards long by six yards broad, with just room to stand upright. This was the 'ward-room,' and here I found the 'sub' correcting some charts, and the 'gunner,' to both of whom Vincent introduced me.

'We're rather busy this morning,' said Vincent, lighting his pipe. 'We have only come up here to get a new class of stokers on board after having trained and discharged the old set; and we're going out in about ten minutes' time. You were very lucky to catch the ship at all. Look here! You had better come out for the day with us. You'll see a little of what destroyer-life is like, and it will give you a bit of a blow through and an appetite. We shall land you at Sheerness afterwards, unless you care to stop for the night.'

At once I acquiesced, and being left alone for a little, I had time to survey my surroundings.

Facing the door was a stove and a small sideboard, with a bookcase above, filled with books on service matters, such as *Channel and North Sea Pilots, Light Lists, Tide Tables*, &c.; a paper-rack and a wine-locker, a pipe-rack, block, chronometer-box, and one or two little nicknacks filled up that side.

On either side of me were the bunks, of which altogether there were three. These bunks, though narrow, seemed very comfortable; they were fitted with drawers underneath, and a small wardrobe was fixed at the head of each bunk. On one side, also, was a chart-box and a looking-glass, whilst behind me were lying a pile of sea-boots, and on the bulkhead were hung coats, mackintoshes, oilskins, and sou'-westers. Glancing up overhead, I saw camp-stools, swords, golf-clubs, sticks, tennisrackets, fiddles for the tables in rough weather, &c. My friends on board knew how to pack, evidently, for not an inch of space was lost.

Having thus completed my inspection of the ward-room, I looked outside: on my left a very diminutive pantry; on my right a bath-room in like proportions, with two washing arrangements similar to those one sees in a railway carriage, and also an indiarubber bath.

Getting tired of stopping down below, and yet fearing to be in the way, I went on deck. To my surprise, I found all the men forward, and that we were quietly steaming down the Medway.

I was standing on the quarterdeck, with a sixpounder gun on a platform in front of me, which gun was reflecting the sun's rays in my eyes and dazzling me, so beautifully clean and nicely-polished was it. Behind me was a screen, sheltering the

'after-steering position,' fitted up, I found out later, exactly as the one forward was. There was also a hatch which led down to the captain's cabin, outside of which were store-rooms and racks for rifles and cutlasses. The cabin was a nice little place, and had a bunk, wardrobe, writing-table, and bookcase, and also a little bath-room outside, but no stove. The captain in these ships messes in the ward-room, and only uses his cabin for sleeping in and for correspondence work.

Walking over the platform, I found a torpedotube, and alongside it a hatch, which, on inquiry, I was told led to the chief petty-officers' mess. It was quite a little place, about half the size of the ward-room. The engine-room artificers have a similar mess on the other side of the deck. Everything was beautifully clean, and the table

was quite white from hard scrubbing.

Going farther forward, my olfactory organ was tickled by a most savoury odour, and on looking down another hatch I found that here was the galley, and beside it stood the ship's cook hard at work getting the dinners ready. There was also here a dynamo for supplying electricity to the search-light, which latter was placed between the engine-room hatches on deck.

I now came to the engine-room, but did not go down just yet. Passing the big after-funnel, I came on an open space, and a couple of bluejackets, who were splicing a wire rope, volunteered the information that this was where the foremost torpedotube would be placed when the ship was used solely as a torpedo-boat. Here I was joined by the 'sub,' who apologised for his sudden ascent from the ward-room, and offered to show me round the rest of the ship, as the captain could not yet leave the bridge for any time.

I rather liked the rig he was in-a thick pilot coat, ditto trousers, a football-sweater, with a white silk scarf in lieu of a collar, a fairly old cap, heavy but close-fitting leather sea-boots, thick gloves, and a pair of binoculars slung round his neck, formed his attire; which, as he went forward, I could not help thinking was, for this sort of rough-and-ready

life, absolutely the best he could wear.

Between the two foremost funnels is the standard compass, with the flag-locker underneath it, and a chart-table, all of which the 'sub' pointed out.

"How many men are there on board?' said I.

'Oh, our complement is fifty-two all told; but about thirty of these are stokers for training in the working of water-tube boilers, and they are changed every month. This is their mess-deck, The magazine and shell-room for the twelvepounder are under here also.'

'There's not much room for thirty, is there?' hazarded I, drawing a bow at a venture, as I felt

I should say something.

'Well, no, there's not very much; but they get along all right. You see, some sling their hammocks, and the others sleep on the lockers; and if they are cold they use their duffle suit, which consists of a pair of trousers made of very thick fearmought, and a big coat of the same material with a hood attached, and it is fitted with beckets and wooden toggles for fastening it by. We (the officers) find them very useful to put on over our oilskins during a bad night's run. You can't get very wet, and they keep you as warm as toast.

'Do you know what this is?' he said, to change the subject. 'It is a collapsible boat. We have two, one each side, you see. They are hoisted out by that derrick on the mast, and if we had to abandon ship they would take seventeen men each, and provisions for them as well.

'You see the deck is covered with a kind of linoleum; it is found to answer much better than wood in this class of ships, as also in torpedoboats. Here are two six-pounder Hotchkiss guns; these and the twelve-pounder up there constitute our bow-fire. Pretty strong for so small a ship, isn't it? You see, our object is to overtake and destroy by our superior gun-fire an enemy's torpedo-boats; consequently, when chasing, bowfire would be of great importance, and I think that chap up there would give a pretty good account of himself.'

He pointed up at the gun on the fore-bridge as he spoke, and I agreed with him, and inwardly determined that any further acquaintance I might make with 'that chap up there' should be made from behind, and not from in front.

'The ship seems very long,' I said; and, being rather curious on this point, I added, 'What length is she?'

'Oh, about two hundred feet,' he answered.

'And her beam?'

'That is about nineteen and a half feet, and she draws about six. See here; this is the conning-tower, with our half-inch of armour on it. Isn't it a lot? We can steer from here, and in bad weather we have to, as one would be washed away on the bridge.'

I looked inside. There was just room for two people to stand up inside, and it was fitted with a compass, steering-wheel, telegraph to the engineroom, and voice-pipes to the torpedo-tubes and

various other parts of the ship.

'You say this is only half-an-inch thick?' I queried. 'How thick, then, is the ship's side?'

'Oh,' said he, laughing, 'about an eighth of an inch; and before I could quite grasp how much an eighth of an inch of steel really is in thickness, he had disappeared down a ladder at my feet.

'Come down here,' he said, looking up and smiling at my evident blank dismay at his last piece of information. 'This is the mess-deck for the bluejackets-under the turtle-backed fore-

castle, you see.'

One long table stood in the centre, and two rows of lockers ran along the ship's side. A few men were down here, one stitching canvas, another mending his clothes, one reading a book, another writing a letter, and one stretched out right forward fast asleep, utterly oblivious of everything going on beside him.

'About twenty men live down here,' said the 'sub.' 'These are their hammocks, and that is the capstan engine—we have a steam-capstan.'

He pointed above his head as he spoke.

'More store-rooms under our feet, too,' he continued. 'We keep the explosive war-heads for the torpedoes down below here. We have two eighteen-inch torpedoes, carried, without the heads, in the tubes themselves. Now let us go up on the fore-bridge.'

I followed him up the little iron ladders till beside the twelve-pounder, alongside which my old chum was standing, a chart in one hand and a pair of binoculars in the other; and when I reached the top I drew a long breath.

We had increased speed, and now we were well out of the Medway, and gliding along through the water so smoothly that I could hardly believe the statement that our speed was over twenty-four miles an hour. Slipping through the water with no vibration at all, the only indications of speed were the ripples on the water flying past us, and the fountain of spray rising at our sharp, straight stem, sparkling with all the colours of the rainbow as the sun's rays flashed upon it.

Far astern is the Nore light-vessel, clearly showing up on the horizon; a little ahead is the Mouse light-ships, round which we are going.

A beautiful blue sky above, with hardly a cloud to be seen, except that on one part of the horizon there is a little haze, which does not altogether cover a number of sailing-ships, vainly trying with the little wind there is to make headway against the tide. The fountain at the bows is playing beautifully now, and all around is the pure, bright sea-air blowing against one's face, and through one's clothes, and into one's body; rousing, stimulating, and reviving one, and making one feel a new man, so refreshing and exhilarating it is.

Oh! that time was splendid, and I felt glad to be alive to experience such a sensation.

No wonder these fellows look so healthy with such a tonic, and living such a life as this.

'Starboard!' sings out my friend. 'Starboard, sir,' answers the quartermaster, whose head I, being startled in my reverie, nearly tread on, it having come up suddenly through a hole in the platform on which we are standing.

'Well, how do you like it?' queries my chum.
'Midships; steady.' 'Steady, sir,' replies the head.
'I wish I were in your place,' said I. 'You

have made a new man of me already.'

'Oh,' replied he, laughing, 'come out on a cold, wet night in January, when a heavy sea is running, and you have to hang on to the rails or the twelve-pounder here to prevent yourself being carried off your feet; when the seas rise dashing on the turtle-back, and washing all over

the upper-deck; when you are soaked to the skin, and, clinging on to something, are shivering and thinking of the many thousands ashore who are fast asleep, warm and snugly tucked between the blankets; when the blinding spray and sleet is lashing your face like whipcord in an incessant shower, so that you can hardly open your eyes as you vainly struggle to peer into the darkness to discern the lights of the vessel ahead; and when everything down below in the ward-room is sliding about on the deck, gloriously mixed up, so that if you wish to get a piece of meat for supper you have to hold the joint with one hand whilst you hack off a slice with the knife, and when you can't stand up by yourself-you'd soon change your mind.'

Walking aft, we went down the engine-room ladder.

'I'm sorry we are only going 280 revolutions per minute now,' says he. 'You should see them going at 350. That's the time.'

But even as it is, I wonder mightily to see these two engines with their many bright rods flashing up and down at a speed I can hardly make my hand move at; and the cranks whirring round at the rate of four revolutions per second are alone enough to make one pause and wonder when human ingenuity will reach its limit, and also speculate on what a terrible smash there would be if anything chanced to go wrong.

'Lunch!' yells the matter-of-fact 'sub' down the hatch, and again are my musings rudely interrupted.

'We'll just have time for "scran" before we get in,' he says, as we all sit down round the little table in the ward-room. 'The skipper is going to have his afterwards. Aren't you hungry? I am.'

To which question I had to confess a mild 'Yes, very.' To tell the truth, I have ever since been envious of the appetite I had that day. But to continue.

Chaffing and joking formed the conversation whilst plates were being emptied and refilled, for every one seems to be put in a good temper by this sort of work. Millionaires should buy a destroyer, and try the life as a recipe for dyspepsia.

As to the messing, I must say it was far better than I imagined could obtain on board a small boat like this.

Plain but good and substantial food, excellently cooked, is the order of the day; and cut and come again is the order of the table; which last I carried out in spirit and in truth. A knock at the door. 'Come in,' shouts the 'sub.'

'Just going into harbour, sir. Captain sent me down to tell the officers,' says the signalman.

Up the others jump. I follow, and reach the deck just in time to hear the telegraph gongs sound in the engine-room as the indicators are put to 'slow.'

We pass up close under the stern of the Sans Pareil, the guardship here, and very shortly after reach our buoy; and then I noticed that the smartness and agility which was the peculiar characteristic of the British bluejackets in olden times has not yet passed away, for a hand is down over the side and on the buoy in a twinkling, a hook-rope is hooked on, the cable passed down by the aid of a small rope, and then quickly shackled on to the buoy, and the bluejacket is up the side and inboard, whilst the cable is paid-out under the direction of the gunner on the forecastle.

I hear the dingey called away, and turning

round with the 'sub,' who has been explaining the proceedings to me, and going aft, I find my chum in mufti waiting to take me off. As for his lunch, he will get that ashore, he says; so 'chin-chins' are passed, and, stepping over the side and down the ladder, we are quickly pulled beachwards, after a day's outing which was full of novelty to me, and which will not be forgotten for some time to come.

ELBOW-GREASE.

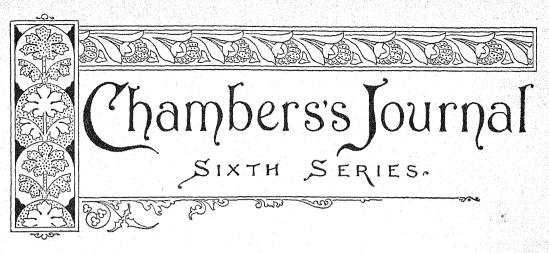


HE writer well remembers, when a very small child, watching one of the maids polishing the furniture, being requested by her to go and ask the mistress if she might send to the village shop for three-pennyworth

of elbow-grease. Taking the joke in earnest, she went, only of course to be sent back with the message that the girl must provide the article herself. This same elbow-grease, which polished our grandmother's oak and mahogany till you could see your face in it, brightened the household steel and brass till it sparkled in the sunshine, and scoured the floors to such a pitch of cleanliness that, according to Mrs MacStinger, 'you might have eaten your dinner off them,' appears to have dropped out of the methods of the 'modern' maid-servant—though it is to be hoped that maid-servants nowadays are not all modern in this sense.

The smart board-school-taught young persons whom the unfortunate middle-class mistress interviews at the registry office nowadays require instead an unlimited supply of the thousand-and-one soaps, polishing powders, and other labour-saving appliances perpetually thrust under our noses by the advertising fiend. Putting up as best she may with the consequent depletion of her purse, the lady fondly hopes that Mary Jane and Sarah Anne - we beg pardon, Florence and Beatrice - will improve the shining hours, and leave a shining way behind them in their daily march through the household domain. Alas! in their wake she finds only a dusty track strewn with the débris of her household gods. For Florence and Beatrice consider it their principal business to amuse themselves; and reading The Mock Marriage or Love's Young Dream, inspecting the mistress's belongings, acquainting themselves with her private affairs, and gossiping with the back-door fraternity are often much more agreeable occupations than washing dishes and saucepans, or polishing floors and furniture. And if such perfunctory attention as they may see fit to give, with a huge expenditure of soap, soda, &c., will not keep a house clean, that is not their fault; and as for things being broken, the cat does it, and Florence and Beatrice are outraged and indignant young persons if taxed with pussy's misdemeanours, or called to account for the dirt and disorder everywhere apparent. Only oldfashioned and prejudiced persons could expect these superior young women to take any interest in such matters as cooking and cleaning, or question their right to be paid for amusing themselves instead of doing the work they have undertaken, to say nothing of breakage and damage. The thought of any obligation on their part to fulfil their duties to the best of their ability seems to have no place in their mind. And this deplorable lack of conscientiousness is not confined to the Florences and Beatrices or the domestic department; it is equally evident among the Johns and Thomases-we mean the Sydneys and Ernests-of the national workshop.

Some cry out upon education as the cause of the trouble; and if by education is meant only a smattering of book-learning, we think they are right. It was long ago demonstrated that 'a little learning is a dangerous thing,' and the truth of the old saying was never more apparent than at the present day. We give the children in our schools just so much book-knowledge as serves to give them highly-inflated ideas of their own wisdom and importance, and little or no sense of moral responsibility, and then turn them loose, with untrained hands and undisciplined minds, to become the despair of employers and the pests of society. What is wanted is not less, but more, education, in the shape of such practical training as shall qualify its recipients in some degree for the work which lies before them, and enable them to take an intelligent interest in its performance. And as the basis of all, a careful inculcation of the simple precepts of Holy Writ, the plain 'Thou shalt' and 'Thou shalt not' as regards heaven and our neighbour. He whose legs are unequal must needs walk lamely; and unless we take care to nourish and develop the still quite imperfect moral sense of the popular mind, our national progress, great as it may be, must still be a halting one. So long as we shirk our duty in this regard, the blame for the social discomforts and embarrassments we have commented on will lie mainly on our own shoulders.



HOLY ISLAND.

By SARAH WILSON.



E have a singular geographical feature on our north-east coast, between Bamborough and Berwick-upon-Tweed, that has been called from time immemorial a semi-island. When the tide of the great North

Sea, or German Ocean, is high it is a complete island; and when it is low it becomes part of the mainland, or connected with it by nearly three miles of wet, flat sands, which are sometimes smooth and sometimes wrinkled, for the most part firm to the tread, but in some places sloshy and 'quick.' This has been noticed and described by Bede, and by Scott in Marmion. In common parlance it is always called 'the island' by the residents, though the necessary traffic between it and the mainland is carried on as much by conveyance as by boat. Those who have no vehicles nor horses take off their shoes and stockings at low-tide and walk over the long stretch of intervening sands. The removal of these articles of apparel is not necessary till the footpassengers are confronted by the first of a few small streams left by the tide, or by the rivulet known as 'the Low,' in which the water remains at a stationary depth of several inches. At long intervals of time there are casualties. The tide comes in with great force and speed, and sometimes people are overtaken by it and carried away. Benighted foot-passengers have lost their way and been drowned, and conveyances have been occasionally overwhelmed by the racing-in waters and swept away. For many years there has been a line of tall wooden guide-posts passing from the mainland to the island to show where the route is free from quicksands, but nevertheless, as stated, accidents still occur, though happily but rarely. Not long since a solitary and venturesome artist returning from the island was intercepted by the rapidly incoming tide, and only saved his life by climbing to the sort of cage fixed to the top of one of these posts, and remaining on it till the waters receded again. Two residents, too, returning to the island No. 20.-Vol. I.

in the deepening dusk in a conveyance, became uncertain, owing to a sharp swerve of their horse, as to which was the right direction to take, and only saved themselves from disaster by climbing one of the poles and feeling for the indicator on the top. Still more recently a traveller crossing in a gig was swept out of it and drowned. And the parish register tells of many losses in former times.

This geographical curiosity is Holy Island, formerly known as Lindisfarne, but thus designated anew in later times on account of the sanctity of the lives of the missionaries who took up their abode on it in the days of the Saxon kings. With rough-and-ready reckoning it may be said to contain about a thousand acres, and to be about three miles long and half that extent in width. To the visitor from the mainland there are various items of interest on this small area -the village, the castle, the church, the majestic ruins of the priory and priory church, the vicarage, the Heugh, which is a long, sloping basaltic rock, forty feet high, that the fishermen use as a lookout; the cliffs, the coves, the harbour, a lakelet, the flora, birds, seals, and the ancient traditions, to say nothing of the hardy, hearty population of somewhere about six hundred souls, and the various modern efforts at progress, which include a schoolhouse, a chapel, a manor-house, and a telephone connected with the telegraph on the mainland. Curiously, there is also an island on the island, or, rather, about a hundred yards from the verge of its shore facing the mainland. This consists of about half an acre of basalt rock that rises considerably higher than the rest of the beach, on which may still be traced the foundations of a small chapel. This was St Cuthbert's Chapel. Tradition has it that the austere recluse often retired from the life in the community to this little island for long periods of isolation, when his comrades made their way to it over the rocks at low-water to convey food to him.

rs receded The history of the island begins in the days of the island the Heptarchy, when Oswald, king of Northumbria, [All Rights Reserved.]

then residing at Bamborough, invited the Christian community in Scotland to send a missionary to instruct his subjects. The first delegate, who was sent from the island of Iona, after a year's trial returned with the conviction that the Northumbrians were too ignorant, and their minds too unreceptive to be instructed; but a second one, Aidan, less faint-hearted, established himself permanently on the island of Lindisfarne, which probably recommended itself to him on account of its correspondence with the insular situation of the abode of the community that he had left. For sixteen years he carried out the work thus undertaken, with the assistance of twelve followers, erecting churches (then built of wood), baptising in one week, as is reported, as many as fifteen thousand people, and travelling about preaching the gospel in remote places; and then he died, almost in harness. His successor, Finan, equally ardent and devout, baptised two royal converts, the kings of Mercia and East Anglia.

The three succeeding bishops also further increased the usefulness and renown of the settlement; but it is to the sixth bishop, Cuthbert, or to his biographers, that most of the romance of the island is due. His long, solitary seclusions, the austerities he practised, the disdain and dislike of women imputed to him, all enlarged upon by his biographers and embroidered with their pious fancies, and followed up by the singular appearance of exemption from decay presented by his remains when examined centuries after his death, created a personality that takes rank below but few of our celebrities. After a succession of sixteen of these Saxon bishops, an incursion of the Danes caused the brotherhood to gather their valuables together and depart for the mainland, when the island became uninhabited once more.

Nearly two hundred years afterwards, when St Cuthbert's remains were enshrined in the magnificent cathedral on the high bank of the Wear at Durham, it came into the heart of those in authority there to take possession of the deserted site once more, and eventually to raise upon it the superb fabric of which there are such considerable remains. Besides providing the necessary accommodation for the community of monks they established, one Ædward laid out the dimensions of the priory church on an extensive scale: a hundred feet of length for the nave and thirty-five more for the chancel, with wide transepts and a great central tower. Those under him reared vast cylindrical columns to aisles that widened the building to forty-four feet, and some of these were incised with chevrons, and some enriched with semi-detached columns, similar to examples in Durham Cathedral, and crowned with cushioned capitals. They made inviting doorways with re-ceding columns, and pierced the massive walls with many windows, all showing the unmistakable features that give the distinguishing touches to Norman architecture. And in this majestic building services were performed for nearly five hundred years. Then came the dissolution of monasteries, and it was used as a storehouse; and after that many of the stones were taken away for various purposes. In 1723 the old bell-tower of the parish church and the battlements were repaired with stones taken from the priory church. Nevertheless there is sufficient of the august masonry remaining to impart an indescribable charm.

There is an open space in the village with a cross in it, telling of the time when a market, now discontinued, was periodically held there. There is also an old house, known as the Bishop's House, in which there is an Elizabethan panelled chamber. For the rest, there are four inns, a new two-storied hotel, the fishermen's cottages, a few larger houses, a farm or two, and a rocket and lifeboat house. Around on all sides is the sea, glittering like diamonds, and gently lapping or rolling in with dull, angry waves according to the weather, ever coming or going. Boats bask in the sunshine or bear the burden of the rains and winds on the shore, or rise and fall upon the waters; and black and white ships pass by, in the distance, in silence. From certain points as you walk about the island you can see the great castle on the steep rock at Bamborough across the intervening sea, or sands, as the case may be, as well as the twenty-eight Farne Islands, with their two lighthouses, one of which, the Longstone, has the special interest of having been the home of Grace Darling. Everywhere close at hand you see the steep-sloping Heugh, with sun-bronzed seafaring men on it with telescopes, ever on the lookout; the island castle, with its three cannons on its batteries; the village houses, with their fluted-tiled and slated roofs; and the priory ruins, with their majestic arches high in the air.

The pale-gray old parish church is only fiftytwo feet west of the priory ruins. In the churchyard are many sea-bleached tombstones, mostly standing up out of the arrowy grasses, inscriptions on which tell of frequent deaths at sea, and many of which have the sacred monogram I.H.S. upon them, understood locally to mean, 'I have suffered.' By contrast with the richness of the ornamentation on the priory ruins, the church looks plain at a first glance, but a closer examination reveals features and facts of much interest. We may see that it was a small Norman building to begin with, to which an arcade of Transitional columns, still strong, was added on the north side a few years afterwards, with chamfered arches built with red and white stones alternately. In the next century, known architecturally as the Early English period, a new chancel, nearly fifty feet long, was built; and in the succeeding one the south side of the original church was taken down and a south aisle thrown out. The walls are thick and strong, and pierced with splayed windows of these different centuries of workmanship. There are some minor features, such as two porches, a priest's door in the chancel, a piscina marking the site of

a chantry in old times, and three ambries. There are also a few ancient grave-slabs marking the last resting-places of persons of distinction. A few years ago there were several small models of various sea-going crafts in different parts of the church, which had been placed there by the fishermen as decorations. These have now been removed, but there remains a general aspect of devotional simplicity and severity. Below the wooden top of the communion - table are the original stone supports of the ancient altar. The register begins in the reign of Queen Elizabeth, and the communion-plate bears the date 1575. So -just as we take it for granted there is only grass under foot as we approach the edifice, till we notice sea-lavender here, tufts of thrift there, the hemlockleaved crane's-bill farther on, the sea-side thistle and soft-knotted clover, and many another of Nature's floral profusions near at hand-we find, when we come to look, that there are many fragments of the times between the days of Ædward and ourselves embalmed in it.

The castle, now occupied by coastguardsmen, has its own romance. In the Border Survey made by Sir Robert Bowes in 1550, it is described as likely to be of 'great purpose,' both for defence and for the annoyance of enemies should such arrive on any part of the island. A hundred and sixty-five years afterwards an enemy did arrive in the persons of two brothers named Errington, who, when five out of the seven men composing the garrison were absent, took possession of it in the name of the Pretender. The possession only lasted for a short time, but the possibility so carefully considered long beforehand came to pass. Sir William Brereton, writing a diary of his travels in 1635, calls the castle 'a dainty little fort,' and mentions that the governor, Captain Rugg, was as famous for his generous entertainment of strangers as he was for his great bottle - nose, which was the largest the traveller had ever seen. There are traces of another small fortress on the eastern end of the Heugh that was probably intended to assist in the protection of the harbour. From the evidence of its stones we can tell it mounted two guns. The parish register records the burial of thirty soldiers in the churchyard in 1639—'About this tyme were sundrie sogers buryed,' it states simply.

Then there are the coves. These are far-reaching recesses or caves, hollowed out into the cliffs on the north side of the island. They are dark, steep cliffs, full of fossilised encrinites, and rise to a height of about forty feet. The fragments known as St Cuthbert's beads are found in abundance here. Those who have an eye for such things will note boulders and pebbles of granite, porphyry, syenite, graywacke, basalt, and other stones from distant sources strewn on the beach. The waters under these cliffs are so clear that pebbles have been seen at the bottom through a depth of many feet. There is a sandbank, too, called the Seal-bat, where seals are frequently seen and young ones occasionally captured. Nearer to the Castle Point shoals of porpoises are often noticed, especially in the herring season. As we wander over the sandy flats and links sea-birds fly overhead; sometimes a flock of brent geese. Underfoot grow the elk's-horn cuplichen, the grass of Parnassus, the water-pimpernel, the blue fleabane, the catch-fly, the wild larkspur, spoonwort, marsh-arrow grass, and the dwarf tufted centaury, among other plants. Wall-flower, said to be indigenous to the island, is conspicuous at the

Macready tells us in his Memoirs that he resided on the island for a time in his young days, and that in the remoteness and quietude of his surroundings he almost forgot his native tongue. As the curtain descended upon his histrionic triumphs, amidst the deafening applause of enraptured townbred audiences, the remembrance of the lonely sands, the quiet, breezy links, the richly-wrought ruins, the ancient church and all the medieval associations with which it is fraught, the brave fisher-folk, thinking naught of their countless unrecorded deeds of heroism, and passing quietly to and fro on their allotted tasks, must have afforded a contrast that was strong indeed.

JOHN BURNET OF BARNS.

CHAPTER XXIV.—HOW TWO OF HIS MAJESTY'S SERVANTS MET WITH THEIR DESERTS.



HE next morn broke fair and cloudless, and ere the sun was up I was awake, for little time must be lost if we sought to win to Smitwood ere the pursuit began. The folk of the cave were early risers,

for the need for retiring early to rest made them so; and we broke our fast with a meal of cakes and broiled fish almost before daylight. Then I went out to enjoy the fresh air, for it was safe enough to be abroad at that hour. Nothing vexed the still air on the green hillside save the flapping peewits and the faint morning winds.

Marjory meantime ran out into the sunshine with all the gaiety in the world. She was just like a child let loose from school, for she was ever of a light heart, and care sat easily upon her. She left me to go out from the little glen, which was the entrance to the cave, into the wider dale of the Cor Water, which ran shallow between lone green braes. I heard her singing as she went down among the juniper-bushes and flinty rocks, and then it died away behind a little shoulder of hill.

So I was left to my own reflections on the plight in which I found myself. For the first

time a sort of wounded pride began to vex me. It made me bitter as gall to think of it, and by whose aid my misfortune had been effected. A sort of hopeless remorse came over me. Should I ever win back the place I had lost? Would the Burnets ever again be great gentlemen of Tweeddale, a power in the country-side, having men at their beck and call? Or would the family be gone for ever? Would I fall in the wilds, or live only to find my lands gone with my power; and would Marjory never enter Barns as its mistress? I could get no joy out of the morning for the thought; and as I wandered on the hillside I had little care of what became of me.

Now at this time there happened what roused me and set me once more at peace with myself. And though it came near to being a dismal tragedy, it was the draught which nerved me for all my later perils. And this was the manner of it.

Marjory, as she herself told me afterwards, had gone down to the little meadows by the burnside, where she watched the clear brown water and the fish darting in the eddies. She was thus engaged when she was aware of two horsemen who rode over the top of the glen and down the long hill on the other side. They were almost opposite before she perceived them, and there was no time for flight. Like a brave lass, she uttered no scream, but stood still that they might not see her. But it was of no avail. Their roving eyes could not miss in that narrow glen so fair a sight, and straightway one called out to the other that there was a girl at the burnside.

Now, had the twain been out on an ordinary foray it would have gone hard indeed with us; for they would have turned aside to search out the matter, and in all likelihood the hiding-place would have been discovered. But they had been out on some night-errand, and were returning in hot haste to their quarters at Abington, where their captain had none too gentle a temper. So they contented themselves with shouting sundry coarse railleries, and one, in the plenitude of his great-heartedness, fired his carbine at her. Without stopping further they rode on.

The bullet just grazed her arm above the wrist, cutting away a strip of dress. She cried out at the pain; but though frightened almost to death, she was brave enough to bide where she was, for if she had run straight to the cave it would have shown them the hiding-place. As soon as they passed out of view she came painfully up the slope, and I, who had heard the shot, and rushed straightway to the place whence it came, met her clasping her wounded wrist and with a pitiful white face.

'O Marjory, what ails you?' I cried.

'Nothing, John,' she answered; 'some soldiers passed me, and one fired. It has done me no

harm. But let us get to shelter lest they turn back.

At her words I felt my heart rise in a sudden great heat of anger. I had never felt such passion before. It seemed to whelm and gulf my whole being, and my soul was steeled into one fixed resolution.

'Let me carry you, dear,' I said quietly, and lifting her, I bore her easily up the ravine to the cave.

When I got her within our shelter there was a very great to-do. The women ran up in grief to see the hurt, and the men at the news of the military wore graver faces. Master Lockhart, who was something of a surgeon, looked at the wound.

'Oh,' he says, 'this is nothing—a scratch and no more. It will be well as ever to-morrow. But the poor maid has had a fright which has made her weak. I ha'e some choice French brandy which I aye carry with me, for the fear of such accidents. Some of that will soon restore her.'

So he fetched from some unknown corner the bottle which he spake of, and when her lips had been moistened Marjory revived, and declared her weakness gone. When I saw that the wound was but trifling, the anger which had been growing in my heart side by side with my care wholly overmastered me. All my pride of house and name was roused at the deed. To think that the lady who was the dearest to me in the world should be thus maltreated by scurrilous knaves of dragoons stirred me to fury. I well knew that I could get no peace with the thought, and my inclination and good judgment alike made me take the course I followed.

I called to Nicol, where he sat supping his morning porridge by the fire, and he came to my side very readily.

'Get the two horses,' said I quietly, that none of the others might hear of my madness; 'one for me and one for yourself.' Now the beasts were stabled in the back part of the cave, which was roomy and high, though somewhat damp. The entrance thereto lay by a like rift in the hillside some hundred yards farther up the glen. When I had thus bidden my servant I sauntered out into the open air and awaited his coming with some impatience.

I asked him, when he appeared, if he had the pistols, for he had a great trick of going unarmed and trusting to his fleet legs and mother-wit rather than the good gifts of God to men—steel and gunpowder.

'Ay, laird, I ha'e them. Are ye gaun to shoot muir-fowl?'

'Yes,' said I; 'I am thinking of shooting a moor-fowl for my breakfast.'

Nicol laughed quietly to himself. He knew well the errand I was on, or he would not have consented so readily.

I knew that the two dragoons had ridden

straight down the Cor Water glen, making for the upper vale of Tweed, and thence to the Clyde hills. But this same glen of Cor is a strangely winding one; and if a man leave it and ride straight over the moorland he may save a matter of two miles, and arrive at the Tweed sooner than one who has started before him. The ground is rough, but, to one used to the hills, not so as to keep him from riding it with ease. Also, at the foot of the burn there is a narrow nick through which it thrusts itself in a little cascade to join the larger stream; and through this place the road passes, for all the hills on either side are steep and stony, and offer no foothold for a horse. Remembering all these things, a plan grew up in my mind which I hastened to execute.

With Nicol following, I rode aslant the low hills to the right, and came to the benty tableland which we had travelled the day before.

After maybe a quarter-hour's stiff riding we descended, and keeping well behind a low spur which hid us from the valley, turned at the end into the glen-mouth, at the confluence of the two waters. Then we rode more freely till we reached the narrows which I have spoken of, and there we halted. All was quiet, nor was there any sound of man or horse.

'Do you bide there,' said I to my servant, 'while I will wait here. Now I will tell you what I purpose to do. The two miscreants who shot Mistress Marjory are riding together on their way to their quarters. One will have no shot in his carbine; what arms the other has I cannot tell; but at any rate we two with pistols can hold them in check. Do you cover the one on the right when they appear, and above all things see that you do not fire.'

So we waited there, sitting motionless in our saddles, on that fair morning when all around us the air was full of crying snipe and twittering hill-linnets. The stream made a cheerful sound, and the little green ferns in the rocks nodded beneath the spray of the water. I found my mind misgiving me again and again for the headstrong prank on which I was entered, as unworthy of one who knew something of better things. But I had little time for self-communings, for we had scarce been there two minutes before we heard the grating of hoofs on the hill-gravel, and our two gentlemen came round the corner not twenty yards ahead.

At the sight of us they reined up and stared stock-still before them. Then I saw the hands of both reach to their belts, and I rejoiced at the movement, for I knew that the arms of neither were loaded.

'Gentlemen,' said I, 'it will be at your peril that you move. We have here two loaded pistols. We are not soldiers of his Majesty, so we have some skill in shooting. Let me assure you on my word that your case is a desperate one,'

At my words one of them still looked with a haughty, swaggering stare, but the jaw of the other dropped and he seemed like a man in excess of terror.

'To-day,' I went on, 'you have shot at a lady not half-an-hour agone. It is for this that I have come to have speech with you. Let us understand one another, my friends. I am an outlawed man, and one not easy to deal with. I am the Laird of Barns—ah, I see you know the name—and let this persuade you to offer no resistance.'

One of the twain still stood helpless. The other's hand twitched as if he would draw his sword or reach his powder-flask, but the steely glitter of our barrels and my angry face deterred him.

'What do you want with us?' he said in a tone of mingled sulkiness and bravado. 'Let me tell you, I am one of his Majesty's dragoons, and you'll pay well for any ill you do to me. I care not a fig for you, for all your gentrice. If you would but lay down your pop-guns and stand before me man to man, I would give you all the satisfaction you want.'

The fellow was a boor, but he spoke like a man, and I liked him for his words. But I replied grimly:

'I will have none of your bragging. Go and try that in your own sty, you who shoot at women. I will give you as long as I may count a hundred, and if before that you have not stripped off every rag you have on and come forward to me here, by God I will shoot you down like the dogs you are!'

And with this I began solemnly to count aloud. At first they were still rebellious, but fear of the death which glinted to them from the barrels of the pistols won the mastery. Slowly and with vast reluctance they began to disrobe themselves of belt and equipments, of coat and jack-boots, till they stood before me in the mild spring air as stark as the day they were born. Their faces were heavy with malice and shame.

'Now,' said I to Nicol, 'dismount and lay on to these fellows with the flat of your sword. Give me your pistol, and if either makes resistance he will know how a bullet tastes. Lay on, and do not spare them.'

So Nicol, to whom the matter was a great jest, got down and laid on lustily. They shouted most piteously for mercy, but none they got, till the stout arm of my servant was weary.

'And now, gentlemen, you may remount your horses. Nay, without your clothes; you will ride more freely as you are. And give my best respects to your honourable friends, and tell them I wish a speedy meeting.'

But as I looked in the face of one, him who had been so terror-stricken at the outset, I saw that which I thought I recognised.

'You, fellow,' I cried, 'where have I seen you before?'

And as I looked again, I remembered a night in the year before, on the Alphen road, when I had stood over this very man and questioned him on his name and doings. So he had come to Scotland as one of the foreign troops.

'I know you, Jan Hamman,' said I. 'The great Doctor Johannes Burnetus of Lugdunum has not forgotten you. You were scarcely in an honest trade before, but you are in a vast deal less honest now. I vowed if ever I met you again to make you smart for your sins, and I think I have kept my word, though I had the discourtesy to forget your face at first sight. Good-morning, Jan; I hope to see you again ere long. Good-morning, gentlemen both.'

So the luckless pair rode off homeward, and what reception they met with from their captain and their comrades who shall say?

Meanwhile, when they were gone for some little time, Nicol and I rode back by a round-about path. When I began to reflect, I saw the full rashness of my action. I had burned my boats behind me with a vengeance. There

was no choice of courses before me now. The chase would be ten times hotter against me than before; and besides, I had given my pursuers some clue to my whereabouts. You may well ask if the danger to my love were not equally great, for that by this action they would know at least the airt by which she had fled. I would answer that these men were of Gilbert's own company; and one, at least, of them, when he heard my name, must have had a shrewd guess as to who the lady was. My cousin's love affairs were no secret. If the man had revealed the tale in its entirety, his own action must necessarily have been exposed, and God help him who had insulted one whom Gilbert cared for! He would have flayed the skin from him at the very mention.

To my sober reason to-day the action seems foolhardy in the extreme, and more like a boyish frolic than the work of a man. But all I knew at the time, as I rode back, was that my pride was for the moment soothed and my heart mightily comforted.

THE SHAN STATES.



a recent issue of this magazine we called attention to the Chin Hills, bordering on Burma, and to the improvement which had taken place amongst the wild savages inhabiting them, who had always been a thorn

in the side of the Burmese government, until we occupied Upper Burma some twelve years ago. A still greater degree of success has been attained in the Shan States, also bordering on Upper Burma, and some of them touching territory belonging to China, France, and Siam. Here we have to deal mostly with inhabitants sufficiently civilised to appreciate the blessings of peace, although during King Thebaw's sovereignty they were accustomed to scenes of anarchy and rebellion. The Shans, who form the majority of the inhabitants, are Buddhists in religion, and are keen traders, often travelling hundreds of miles in the dry season with heavy loads of merchandise to reach the nearest market. They have their own hereditary chiefs; and our policy, justified in its results, has been to support the rule of these chiefs, who now pay us the tribute they formerly gave, or were supposed to give, to the kings of Burma, whilst we interfere as little as possible with their customs, and support their authority. The record of the past year has been one of peace, progress, and prosperity for the Shan States, and the Lieutenant-Governor of Burma notices with pleasure that a sum of nearly six thousand rupees was contributed to the Famine Relief Fund by the chiefs and people of the southern Shan States. This by no means fully represents the amount of the charity displayed by these good Buddhists. Crowds of Burmese came from the adjoining two districts in Upper Burma, which suffered last year from scarcity owing to the failure of the rains, to purchase rice. For several days two of the Shan chiefs gratuitously fed all travellers passing along the public roads between sunrise and sunset, besides sending seven hundred and fifty bushels of grain by Buddhist priests for free distribution amongst those who had no means to purchase food. Fortunately there was an excellent harvest in the Shan States, and the chiefs had paid attention to the opening out of cart-roads. enabling trade to be carried on to an extent previously unknown. Unhusked rice was selling at about one-sixth of the price asked for it in Burma, pointing to the advisability of an extension of the Burma railway system to this fertile country; for, except in years of scarcity, however good the roads are, cart-hire is too costly to allow of grain, however cheap, being carried any great distance at a profit.

Amongst imports Swiss condensed milk in tins bulks largely. The Shans do not care for fresh milk, and allow the calves to take all their mothers produce. But they like the sweetened canned article, eating it with rice and rice-cakes. The sepoys and natives of India settled in the Shan States are the only milk-venders, and they and the Europeans are the only consumers of fresh milk. As cattle thrive well all over the Shan States, milk might easily be preserved on the spot, and be sold very much cheaper than the imported condensed milk.

Our French neighbours have tried to get over

the exchange difficulty by valuing their piastre de commerce at two rupees six annas, but at Kengtung, the nearest British Shan State, it only fetches two rupees, and is often melted down by traders into lumps and used in crude silver as a medium of exchange. Trade was carried on to a small extent between the Shan States and the French provinces, in a friendly way and with no remarkable incidents, in the past year.

Mr A. H. Hildebrand, C.I.E., the able British superintendent of the southern Shan States, points with pride to the fact that it is only a decade since these states were annexed and the chiefs acknowledged the suzerainty of the British Crown. The record of progress in these short ten years is not unworthy of the British government, under which it has taken place, and reflects the highest credit on the half-dozen British officers who assist Mr Hildebrand and the chiefs in governing states many times larger than England. There were no disturbances in the past year, and but little crime. Three durbars were held, numerously attended by the chiefs and their followers. These same chiefs were at each other's throats before our advent, but now only vie with each other in improving communications with a view to increasing trade. Most of them recognise the fact that their own positions and emoluments are improved when their subjects are prosperous and contented, and as far as in them lies they work loyally for this end. The superintendent, who spends at least six months of the year in visiting the various states, notes the great improvements visible in the various buildings. Substantial wooden houses are now taking the place of the bamboo huts which formerly predominated. Gardens neatly fenced in are the rule now in the principal places, instead of the exception, whilst roadside trees are also planted and carefully tended for the benefit of the shade they confer. Every variation of climate is observable in the Shan States. The valleys are often insufferably hot in the dry season; but the hills, varying from three thousand to five thousand feet in height, give an almost European climate, and nearly every description of English fruit and vegetable is produced in perfection. The out-turn of potatoes was so large last year in one state that in some bazaars they were selling at two pice, or about one halfpenny, per vise (three and threequarter pounds). Their cultivation continues steadily to increase. Wheat is also grown, and its production might be much larger if a railway joined the Rangoon line and ensured a ready market for it. The seaports of Lower Burma are dependent now on Calcutta for their wheat and potatoes; but, judging from appearances, there is no reason why, in another decade, Rangoon should not export instead of importing wheat, if only a branchline of railway connected the present Rangoon and Mandalay line with the fertile southern Shan States.

The superintendent regrets that nothing has

been done yet in the direction of starting a school which the sons of chiefs might attend. He is assured it will be built next year. The chiefs have promised to support it. It is hardly advisable for them to send their sons to Rangoon, away from their homes; but at Taunggvi, the headquarters of the superintendent, where many of them have residences, and where they would be under Mr Hildebrand's eye, the advantages of such an educational establishment would be great.

The government are to be congratulated on the successful administration of the Shan States, and on the officers chosen to carry out their policy. It has been a success partly on this account, but also no doubt on account of the fact that, instead of the fanatical Mohammedan tribes who yearly. in some part or other of our scientific frontier on the north-west of India, are the cause of such constant warfare and disturbance, we have in the south-east comparatively peaceful and lawabiding Buddhists, satisfied with our rule, and ready to acknowledge that, although a foreign one, it is an improvement on its predecessor. It is only by acknowledging that we have such contented races in the Shan States to deal with that we can carry on the administration as economically as we do, without a single British soldier on the spot, and with so few British officers, sepoys, and policemen. Both rulers and ruled deserve to share the credit of the present happy and prosperous state of things in the Shan States, which has every prospect of being lasting.

English visitors to India would do well to pay the Shan States a visit. Taunggyi, the headquarterstation, is within four days' ride of Thazi, on the Rangoon and Mandalay railway line. It has a club with about a dozen members, who are always willing to show hospitality to the stranger. Twenty miles to the south-west of Taunggyi is a large lake ten miles in length and three in breadth. Fort Stedman, where a Burma rifle-battalion is quartered, is on its shores. The lake-men paddle their cances with one foot, balancing themselves on the other. Good snipe and duck shooting is to be had on this lake, whilst in other parts of the states are to be found bison, bear, cheetas, deer, sambur, and occasionally tigers. A sportsman might pass a few months in many worse places than the Shan States, where he would be welcomed by any of his own countrymen he might meet on his travels, and also be certain to find in every village hospitable Buddhists who would do all in their power to make him comfortable. Taunggyi is spoken of as a possible sanatorium for Burma. In the hottest weather the thermometer seldom exceeds eighty-five degrees in the shade, whilst in December and January it rarely rises higher than seventy. At night a fire is welcomed, and turning into bed with a couple of blankets the usual thing. It is to be hoped that the southern Shan States will some day be made more accessible to travellers; but in the meanwhile, for those who have

leisure, there is no spot in the East better worth visiting, or from which one would return with happier recollections of a bright and cheery population, or greater gratification at the happy results which have followed in the short time which has elapsed since the British annexation. That was the first event in this generation to give peace and prosperity to these fertile hills and valleys.

It may be mentioned that the Shan chief of Hsipaw, one of the northern Shan States, who has visited England with his sons, is one of the two Asiatic nominated members in the new Burma Legislative Council, which held its first sitting in Rangoon in November last. This chief has had an eventful and romantic history. Rebelling against King Thebaw some seventeen or eighteen years ago, he travelled in Siam and Burma. In Rangoon he seemed to think he could exercise the same power of life and death over his followers that he did in his own state; and having information that one of them was plotting against him, he deliberately shot him. For

this he was tried and found guilty of murder by a jury. The government, however, pardoned him, and there is not the slightest doubt now that the chief thought he was acting within his rights as a sovereign ruler, and that he went in fear of his own life from the supposed treachery of his follower, on whom he took such summary vengeance. From the date of his release this chief seems to have thrown in his lot with us, and has proved himself a capable and energetic ruler. His nomination on the Burma Council has gratified both the chief and his subjects, and his state of Hsipaw is progressing favourably in the paths of civilisation and good government. He some time ago was made a Companion of the Indian Empire, and is very proud of the distinction. It is perhaps too much to hope that he will ever publish his life and recollections, but they would, if truthfully told, form interesting and instructive reading to the British, Burmese, and Shan public, abounding in sensational incidents of love and

'SANTA ANNA.'

CHAPTER III.



HE disappearance of the so-called Da Vinci created quite a mild sensation in London. The papers gave it in the same type which they devoted to Baron Brantano's latest and greatest scheme—nothing less than

the syndicating and running of the Turkish Empire as a limited company, capital four hundred millions.

For the next two or three days the life of Messrs Hunt & Roscoe was anything but a bed of roses. The Piccadilly establishment was haunted by detectives, who dropped in at all sorts of times and asked all kinds of personal questions. The partners were wonderfully shy of answering some of these.

The robbery appeared to have been worked by way of the cellar. Through an opening in the grating the padlock had been filed away; indeed, the outside of the trap still bore the marks of the tool.

The circular trap had then been pulled up, and an entrance to the cellar effected. A jemmy had been forcibly used in removing certain obstacles in the way of doors, and thus the shop was reached. Afterwards a fireproof safe had been opened, and the picture abstracted from its frame. The whole thing was the work of some one who knew the craft passing well.

Usually sufferers from this kind of thing are prone to gird at the tortoise-like movements of the police. Hunt & Roscoe found the authorities

much too busy. Shorter noticed this and wondered. And when he entered the shop two days later, and found Inspector Morton there, he wondered still more.

'I think we've got your man,' the officer said cheerfully.

Roscoe's jaw dropped. He muttered something. Why should this joyful news have disturbed him so terribly? However, later in the day the recalcitrant burglar was able to prove a satisfactory alibi, and Roscoe beamed. Shorter was present on both occasions.

'Afraid of the forgery coming out, perhaps,' he mused.

Roscoe was in a frame of mind now to listen to all that Shorter had to say. The latter explained his visit to Pau, and what had come of it. Then Shorter proceeded to allude to the fact that Moss next door was the man who had brought Baron Brantano into the skein.

'That struck me as jolly suspicious,' Shorter remarked, 'especially as Moss has not been near any one for his commission. So I have had two days' hunting up the antecedents of our friend Moss.'

'A man of indifferent reputation,' Roscoe said severely.

'Rather. Real name Morris, and no more a Jew than you are. Narrowly escaped a conviction for arson, Surrey Sessions, 1878; twelve months in connection with a bogus money-lending office, 1884; two years over those Paris picture frauds,

1887; then passing as the Count of Malibran. You remember?'

'Perfectly. But he's been all right for the last five years, for certain.'

'Hasn't been found out, you mean, Mr Roscoe. He's in this swindle for a certainty; how, I shall make it my work to discover. The idea of getting that telegram delivered to you was immense.'

Roscoe changed the subject. He did not feel that his own share in the transaction was one he would care to have blazoned on the housetops.

'What's your next move?' he asked.

'I'm going to see Manders. Lord Maplehurst accompanies me. I'll let you know the result of the interview the first thing in the morning.'

Maplehurst and his companion found Manders not only perfectly sober, but also engressed in the rare occupation of painting. He nodded to Shorter with an air of resigned boredom, and motioned his other visitor to a seat.

'This is Lord Maplehurst,' said the detective.

'Another of 'em?' Manders muttered. 'Oh, this is the branded article, I suppose?'

'I assure you I am the genuine article,' said his lordship; 'and as my character is at stake, I hope you will do your best in assisting me to clear it. The man who passed himself off as me was Pearson, my late secretary. I should very much like to know how you first met him, and under what circumstances; also, how and when you

copied my picture.'

'That is easily told,' Manders replied. 'This Pearson came to me as yourself, and said I had been recommended to him by Moss of Piccadilly as an expert picture-copyist. I'm facile princeps at this sort of thing; learnt it in Amsterdam, you understand. His lordship made no bones about the matter; he was desperately hard up, and wanted to dispose of his picture to some private collector. The idea was to paint another picture to hang in the place of the original. With the aid of a genuine old canvas and the original before me, I worked away in the bogus lord's chambers in Albemarle Street, and in three weeks it was finished. It's all easy enough when you get the touch. I got £100 for my trouble, and I deemed myself pretty well paid. That's all I know.'

'And, now you know why your picture was required,' Shorter observed, 'can you call to mind any suspicious circumstances connected with it?'

'Certainly I can,' Manders replied. 'In the first place, this Pearson seemed a little bit annoyed when he slipped out Moss's name. And the day I went to get my money Moss was in Albemarle Street. They were in the next room to the one I was shown into, examining the picture. I remember Moss distinctly saying: "That will do the touch all right!" Moss went away soon after without seeing me; and when Pearson came in he seemed put out by my presence, and asked me if I had been there long. I suppose my manner reassured him.'

Shorter's eyes glistened. Fortune was favouring him in this matter.

'This is a complicated case,' he said—'a very complicated case. Of course you know that Messrs Hunt & Roscoe had your work substituted for the

picture they bought?'

Manders smiled. We all know the famous aphorism that there is something in the misfortunes of our friends which is not displeasing to us, and any fraud perpetrated upon the dealers always filled Manders with unalloyed satisfaction. It was the same kind of shamed joy we all feel when we read in the press of a money-lender being made a victim.

'Of course I do,' he said. 'Rare joke, wasn't it? If I liked to open my mouth I could ruin those

beggars in a week.'

'I sincerely hope you will do nothing of the kind,' Maplehurst put in. 'I have done you no harm; and you could ruin me as well.'

'I was only jesting,' said Manders, who, in spite of whisky and abnormal hours, was still a gentleman. 'I will say nothing.'

Shorter expressed his satisfaction. He pointed out to Manders that a dual fraud had been committed, and that any blind confidence on the latter's part might lead to the escape of Moss, at any rate; and Manders having again pledged himself to secrecy, his visitors left.

There was one lingering drop of gall in Shorter's cup. He was getting on splendidly-far better, indeed, than he had expected; but he was only a private inquiry agent. Whoever got the public credit for the arrest of Moss and the solution of

the mystery, it would not be he.

At this stage it became absolutely necessary to consult the police. If a raid was to be made upon Moss's premises, the police alone could do it. Shorter invaded Scotland Yard, and there interviewed Morton, the latter being the officer who had the Piccadilly burglary part of the mystery in hand. Morton received his visitor coldly, as a captain in the Guards might have met one holding similar rank in the volunteers.

'Got anything to tell me?' he said. 'In our line we recognise the axiom that you can learn

something from every fool.'

'That's the very reason why I came here,' Shorter replied, with cheerful equanimity. 'We are going to teach one another, my friend.'

'Oh, indeed! Tell me something worth know-

ing, and you shall hear what you like.'

'A bargain! In the first place, I'll tell you all about that picture.'

'I know all about that confounded picture already.'

'No, you don't. You don't know that the one stolen from Piccadilly is a forgery. Now, I'm going to make a full confession to you.'

And Shorter proceeded to open Morton's eyes considerably. When he had digested the facts he began to revolve them in his mind slowly.

'This may be of great value later on,' he said; 'but for the present the knowledge is useless. My business is to find who stole that picture.'

'Have you got any one in your mind?' Shorter asked.

'Well, I don't mind telling you that I have. But on one condition only.'

'Fire away. One gets nothing for nothing in these hard times.'

'Very well, then. You have told me certain things. In all probability the whole of this case will be placed in my hands later ou. I see you have got a clue to the founder of the scheme.'

'I have. I won't tell you the why and wherefore at present. I'm only telling you this because I'm more or less bound to come to you. I can help you, and you can help me, because I'm certain that this later development is part and parcel of the same plot.'

'Quite right. But come to the point, man.'

'I'm coming, said Shorter. 'The author of the scheme is Moss of Piccadilly. You know all about him, of course?'

*Rather. And I'm much obliged to you for the tip. I won't interfere with you more than I can help. What do you want?'

'To know if you have done anything re the burglary.'

Morton placed his hands together judicially. He proceeded to lay down his points calmly and logically. Not without good cause was he spoken of at the Bar as the best witness in the metro-

politan police force.

'Well, I think I have,' he said. 'The whole thing is vague and shadowy at present, but I fancy I've got the right man. In our business, as I need hardly tell you, one thing so frequently leads to another. The fellow in question is quite a stranger to us; I can find out nothing about him. The name he gives is, of course, assumed, and he refuses his address. Looks a respectable man, too. He was handed over to the police drunk and incapable at Waterloo, charged with travelling without a ticket. Where he got in and how far he travelled we can't yet say. On being searched we found upon him some hundreds of pounds in Bank of Bechuanaland notes. If I can dribble on with a remand or two I shall be able to trace them in time. They may prove a lot, and, on the other hand, they may prove nothing. But that is not quite all. There were letters in the fellow's pocket, none of them signed or headed, and one of them clearly relates to some fraud in connection with a picture. The letters "S. A." occur more than once. To my mind "S. A." means "Santa Anna."

Where is this fellow now?' Shorter asked.

'In Holloway, under remand for a fortnight. By that time I hope to have all the strings in my hands.'

'I suppose I can see these letters, Morton?'

Morton crossed over to a safe, opened it, and produced two half-sheets of paper. Shorter examined them carefully, and as he did so his eyes flashed. He said nothing, however, for to go out of his way to enlighten Morton was no part of his business.

'Valuable clues, no doubt,' he said as he carefully studied a sentence. 'Still, it would take some time to identify the writer. If you hear any more in the meantime let me know.'

Shorter rose as he spoke, and Morton gave the desired promise. Then the former went westward slowly and thoughtfully.

'This has been a lucky day for me,' he muttered. 'But my clients are keeping something from me, all the same. What an ass Morton is! In less than an hour's time I shall know who wrote those letters.'

And in less than an hour's time an elderly gentleman, with blue glasses and his hand tied up, dropped casually into Mr Moss's establishment and began to potter about the pictures there.

The proprietor of the establishment came forward. There was nothing lavish or gorgeous about the place, it being a mere sandwich sliced in between the big premises on either side, a slip cut from Hunt & Roscoe's some years before. Pictures there were few, neither would a connoisseur have sighed for their possession.

Shorter took stock of all these things. Rents in Piccadilly, even for sandwiches, run high, and obviously Mr Moss had other means of making profits large and yet not ostentatious enough to bring him in conflict with the Commissioners of Inland Revenue.

There was nobody else in the shop; even the assistant was absent, a fact upon which Shorter had counted in working out his little scheme. Moss came forward rubbing his hands politely.

'What can I do for you, sir?' he asked.

'A mere trifle,' Shorter mumbled. 'Something pretty to suit a girl of about fourteen. Hang in a little boudoir and that kind of thing. About £5 is the figure to which I should feel disposed to go.'

Moss indicated a taking little landscape, and added the perfectly mendacious rider that it had cost him £15 a year before, exclusive of the frame. Plenty of the same kind can be found in every print-shop, painted by clever artists at so much per dozen and a discount for cash.

The commercial side of the matter troubled Shorter but little. He permitted Moss to choose for him, and to pack up the parcel.

'Stop a minute,' he said; 'it's for a godehild of mine, a birthday present. Would you mind writing a few lines for me on a slip of paper and enclosing the same in the parcel?'

Moss raised no objection. Then Shorter dic-

tated as follows:

'To my dear godchild, S. A., from the other S. A., with best love and wishes for a happy birthday.'

Moss scribbled off the message, and handed it to his customer for approval. Shorter's eyes

again flashed as he read.

'Perfectly well,' he said. 'Kindly pack it up and send the parcel to the address I will dictate. Here's a five-pound note. The parcel postage will be threepence? Thanks. Good-day;' and Shorter shuffled out of the shop.

The parcel was consigned to some imaginary Sarah Allen at his own private address, Hampstead way. Needless to say it was the handwriting,

not the picture, that Shorter required.

'It's the same fist,' he muttered to himself-'the same for a million. Moss wrote those letters that Morton showed me. The "S. A." is identical. And now to report progress to my esteemed employers.'

A little later, clothed and in his right mind, Shorter entered the establishment of Messrs Hunt & Roscoe. He found the latter at his post, looking anxious and worried. He seemed nervous also.

'Have you any further information?' the junior partner asked.

'Heaps,' was the cheerful reply. 'I told you Moss was in the conspiracy, and I am right. Any more about the burglary?'

'Confound the burglary!' Roscoe flashed out. 'I'm sick of it. And in any case we lose nothing by it, as you know. What you have to do is to lay your hands upon the man who has stolen the real picture. Until then we can't hope to recover our money from Forrest's people.'

'I suppose not,' responded Shorter, with ruminative forefinger to his nose; 'but my theory is that the thief and the burglar are one and the same person. And Morton is pretty sure he's

Roscoe turned pale. Then he laughed scornfully, if forcibly.

'So they have told us before,' he said. 'They were equally certain about the other man. This will be another felonious Mrs Harris.'

'I don't think so,' Shorter replied. 'Nobody ever saw Mrs Harris, and they have actually got this one. I'll tell you what Morton said.'

And Shorter proceeded to do so. Roscoe followed dismally. He wiped the beads of perspiration from his face.

'Shorter,' he whispered, 'this sounds like our man. It must be stopped at any cost. Crouther splits to save himself?

'Crouther! You actually know the name of the man!'

'Of course we do. But you are all in the dark. Our biggest customer came to purchase the "Santa Anna." We could not say it was sold; we could not declare how we had been taken in. So we procured a professional burglar, who for a tenpound note burgled our premises for us in our presence, and stole the picture, after which it was destroyed.'

Shorter was too astonished to laugh.

'But the marks on the grating?' he gasped.

'The grating was removed into the shop under pretence of coals, and then filed. If the police have really got Crouther we are lost. The thing will become public property, and we shall be laughed out of the trade.'

'Well, it can't be helped now,' Shorter said 'In any case, you can't get your consolingly.

money back from Forrest.'

Whilst the subject was still under discussion a hansom cab dashed up to the door, and Lord Maplehurst emerged. He seemed to be considerably ruffled, considering the usual placidity of his temper.

'Confound it all!' he cried. 'Look here, I've just left your painter friend, Manders. I picked him up in the Strand, eloquently intoxicated, and ready to blab all he knows to the first fool who came along. I put him in a cab and sent him home. Then I deemed it as well to come along here and warn you. That fellow will have to be carefully watched.-Eh?'

The last remark was addressed to a burly individual who advanced into the shop, and who touched the speaker on the shoulder.

'Lord Maplehurst, I think?' he said.

'My name, right enough. What do you want?

'Warrant for your arrest, my lord,' was the reply. 'Lordship knows all about it: Court of Chancery, and all that. Very sorry, but''Do you mean to say I'm your prisoner?'

'Yes, my lord; and it's my duty to conduct you to Holloway forthwith. No, my lord; I must take you straight there.'

Maplehurst made no reply. He was too utterly staggered. He allowed the bailiff to lead him gently away. Shorter was the first to recover

'My lord,' he exclaimed, 'what a farce for the Gaiety this would make!'

The partners made no rejoinder, and Shorter lapsed into silence. The bogus burglary had recalled an old theory to his mind-the theory as to the way in which his clients had been swindled. That Hunt & Roscoe had bought the real 'Santa Anna' Shorter had been convinced from the first.

'Moss's shop was once part of yours?' he asked.

'Years ago,' Roscoe replied languidly. 'We let part of it under the old lease, and it has remained separate ever since. That door yonder used to lead into the part which is now occupied by Moss,'

Shorter was alert in a moment. The door was fastened up, and apparently had not been opened for years. But Shorter had been long enough in his profession to know that what the eye sees is generally the last thing to be credited.

'Um,' he muttered; 'give me one of your most

powerful magnifying-glasses, please.'

With this in his hand, and mounted on a chair, Shorter examined the door critically. As he jumped to the ground his eyes were sparkling.

'I told you Moss was in this business all the way through,' he said, 'and the more I see the more convinced I am of the fact. That door has been recently opened.'

'Impossible!' the partners cried in a breath.

'Why impossible? Aren't doors made to open? Look for yourselves. See the marks left where those bolts and bars have been pulled. On the top of the door there is no dirt at all, and the hinges are smothered with recent oil. Moreover, these screws have been removed, for I can make out steel filings wrenched off by a screwdriver applied not so long ago. And look here; this panel has moved half-an-inch. The beading on the other side has been taken off, and the panel pulled away so as to give the people on the other side free play with the bars. Pooh! I can point out to you a hundred proofs of my statement.'

Shorter proceeded to do so. Roscoe was satisfied so far.

'But what good could it do?' he asked.

'Plain as a pikestaff,' Shorter replied. 'Everything was arranged beforehand. There is the way in, and there stands the safe where the "Santa Anna" was.'

"Which safe I locked myself and pocketed the key," said Roscoe.

'My dear sir, these rascals had three mouths to perfect their scheme. This Pearson would have put obstacles in his master's way till his confederates were ready. Did you never hear of an impression of a safe-key being taken?'

'The thing is just possible,' Hunt murmured.

'Our present staff'____

'Present staff will keep,' Shorter put in. 'Dis-

charged anybody lately?

Hunt explained that they had done so. An assistant named Frederic, a Swiss, who had been with them for two months, had been dismissed a week or two before for insolence. The lad proved

a good servant; he had come from Paris with excellent references, and the firm had seen him depart with regret.

Before Shorter left the shop he had extracted all the information he required. The next day he spent ostensibly hunting for rooms in Canonbury, and ere night had fallen he found his way westward once more with a photograph of Monsieur Frederic in his pocket. That he had deliberately purloined the same from the album of a whilom landlady of Frederic's did not trouble Shorter's conscience in the least.

Hunt and Roscoe recognised the face directly. 'And a capital likeness, too,' Hunt summed up

the argument.

Shorter declined to be drawn, however, as to the clue he was working out. Before bedtime—if a detective is supposed to share in such a luxury—Shorter had dropped in quite casually upon Morton.

The latter appeared to be gloomy and abstracted. 'Well, and what do you want?' he asked pointedly.

'My friend,' responded the visitor, 'I came in for a sight of your engaging and ingenuous countenance. It is a continual feast to me; and incidentally I may ask if you will give a little information as to somebody else's face—a photo?'

Morton's professional instinct was aroused.

'Hand it over, then,' he said.

Shorter proceeded to do so. Morton relaxed into a smile.

'Still on the same trail,' he said. 'Yes, I do know the fellow. You remember Moss getting into trouble years ago for those Paris picture frauds? You do? Well, one of the gang got off by the skin of his teeth—a chap named Lemaire. I was in the case, you know.'

'Yes, yes,' Shorter said eagerly.

'Very well, then. Your friend of the photo and Lemaire are one and the same. I would swear to the fact anywhere.'

Shorter said nothing. All the same, the crux of the mystery was his. He knew now how the genuine picture had been taken and the forgery substituted. And how easy it all seemed now that it was explained!

RHUBARB, THE RHEUM-FOE.



ITH spring comes ever the rheumdish. In shape of jam or tart, pie or pudding, the inevitable rhubarb appears upon the table; and, as if in dutiful answer to its annual coming, all folk feel com-

pelled to eat of it because of the marvellous power of body-refreshing it is known to hold.

Rheum Rhaponticum is the curious name of

the English garden order of the rhubarb-plant, and of it there are several species, the rounded knobs of which, instinct with pulsing life, push upward yearly from the bare, brown ground, and give us one of the earliest indications of Nature's great annual self-renewal.

Of this plant the petioles or leaf-stalks only are used for food. Of the leaves no use seems to be as yet made in England, unless it be for fruit-packing

purposes; though some farmers' wives prefer them to dock or lettuce leaves as cool butter-wrappers, and cottage-women, to whom meat-safes are unattainable luxuries, like to lay them over their cold joints in summer as a sure means of keeping away the blow-fly. Abroad they are bruised and used to allay the inflammation showing in wounded limbs, just as the silver-lined colt's-foot leaf is used with us in old-world houses.

The word 'petiole' is derived from petiolus, which signifies 'a little foot.' The rhubarbpetioles form the foot-stalks for each spreading leaf, and into their juicy composition enter substances of the utmost value in the matter of the purification of the blood and, through it, of the body generally. Oxalic acid, the sour principle of sorrel, is strongly in the juice, and with it mingles also, in large measure, malic acid, the tart property of the apple and of the gooseberry. Neither of these two keen acids mingling in the rhubarb has power to counteract, or make neutral, the other; hence the petioles become doubly strong in tart principles, and to this mixing of the acids they owe their peculiar flavour. What wonder that rhubarb is remarkable for sourness, seeing the twofold acid-strength it has? And thus we know why teeth are set on edge directly at the common sight in spring of hardy urchins chewing chunks of raw rhubarb, as children are prone to do.

In the leaves and in the roots the acids mingle also, though in a proportion different from that in the petioles. In the roots, too, much oxalate of lime is present, and this bestows on them a peculiarly valuable medicinal property, as is exemplified in a high degree in the Turkey rhubarb to be obtained in every chemist's shop. The kind grown for root-supplying is Rheum officinale, and this provides most of the sorts sold under the names of 'Turkey' and 'Russian' rhubarb. By the latter part of its name—that is, officinale—is understood a medicine approved by the faculty, and kept prepared by the apothecary in his officina, or shop—properly, a work-shop.

Binoxalate of potash is present in some quantity in the petioles of all kinds of Rheum. The combination of the potash, an alkali, with the different acids produces most valuable salts of various sorts; and these take action immediately on the membranes of the body wherever they come in contact with them. Through the eating of rhubarb the stomach is highly stimulated and all the intestinal juices excited to good action; the salts enter the liver and the blood, doing excellent work in both; the acids, by inherent astringent property, clear away all unnecessary and unwholesome mucus, overpowering and neutralising all weaker acids of noxious nature generated in the tissues; and the alkalies aid the bile-flow and help the pancreatic juice to do its work of fat-emulsifying. Thus rhubarb labours in the human organs, every one of which receives its benefits abundantly.

The Rheum-plant is a natural tonic that braces up the whole system-a general strengthening and purifying agent; and its good properties are brought out and improved by proper cooking. Especially does rhubarb prove a good friend to the owner of a bad skin, for it has a peculiar property of tightening the relaxed and gaping pores, that yawn to receive the tiny stoppers of dirtparticles ever afloat in the air, which, once caught by the pores, become unsightly blackheads a little later. If the blackheads be already present in unwelcome arrays of ugliness, the astringent rhubarb-influence is able to expel them, causing a rapid increase of the skin action; thus it becomes a sure complexion cleanser, and, as a consequence, a beauty-giver.

Through stimulation of the liver, and by the bestowing of restored tone on that organ, this good food-medicine can remove the dull look from the eyes, take the yellow tinge from the flabby eyeballs, which it renders firm again, and destroy the baggy, livid appearance that a slow-working liver is wont to bring under the lower eyelid. By taking the heaviness from the eye it also takes the tired lines that would speedily develop into the wrinkle so dreaded as the age-sign, though often it is more likely to be the signet set by weariness. Through the giving of salts much needed by the blood, that the vegetable scarcity of winter is apt to impoverish, rhubarb becomes a preventer of pimples, and scurvy itself would yield ground to it as quickly as to lemonjuice. Skin-blotches cannot long afflict the eater of it; and one excited well-nigh into feverishness would find his system cooled deliciously and his nerves soothed into restfulness by means of a long draught of life-giving rhubarb juice made palatable and sweet.

For a gratefully-acid and most cooling summer drink can be very quickly made when this good garden-gift is especially plentiful, by infusing a couple of well-crushed, raw stalks in a jugful of boiling water, which is then sweetened to taste and left to cool. This is rhubarb tea. Apple tea, which some prefer, is made in exactly the same way

The inhabitant of far Eastern lands well recognises the sterling qualities of the Rheum-plant, and thankfully accepts the gifts it has in store for the human body; and he puts it to splendid uses. From the Orientals, left by us so far behind in many ways, came the knowledge our doctors hold of the plant's medicinal properties; and they use the petioles extensively—especially those of R. Ribes—in the preparation of that most cooling and delicious drink, sherbet, the making of which prevails throughout the Orient. The Turks and the Persians—who are most noted for the excellence of their snowy, foaming beverage, the sherbet sold in all bazaars and found so cunningly commingled,

so gratefully sweet and yet acidulated—could tell of rhubarb gardens rifled for the sherbet-making, did they care to speak their secrets. Rheumatism is an ailment not greatly prevalent in the sherbet-lands; and, in spite of our damp, insular climate, it would be less of a curse here if the folk would only make closer acquaintance with the rheumfoe, and use it more.

Rheum its name is, rheum's enemy though it be, and that name was given because the roots and petioles were found to be sovereign specifics in the curing of all rheumy, or mucous, disorders.

Anciently all ailments were ascribed to the flowing of rheum, or humour, through the parts affected, and that painful muscle-ill we term rheumatism received its name because of this notion. It is uric acid generated in the blood that is the dire cause of the pangs endured by the rheumatic person, and this acid is neutralised by the alkaline matter contained in the rheumfoe, and by the strong counteracting powers of its oxalic and malic acids. Any excess of limy matter or chalky deposits in the system can be neutralised by the same agencies.

Various are the methods of rhubarb-cookery. A favourite dish with children is the petiole well sweetened, stewed with a little water, and flavoured with the peel of a lemon. Orange-peel is a good flavouring for it, and cloves with rhubarb are found excellent. Rhubarb juice extracted, mingled bulk for bulk with water, and made into syrup, using therefor a pound of white sugar to each pint, makes a drink-foundation of the best teetotal kind, and it will keep a long while.

Rhubarb wine is a strong intoxicant, as abstainers from spirituous drinks ought to know. The wine generates in keeping, through its fermentation, a really large quantity of alcohol, and when two or three years old is as cunning a betrayer of the unwary as ever was port wine. A lady who was a total abstainer once proved this at the cost of her self-respect. Being thirsty one day at a friend's house, she drank off a tumblerful of rhubarb wine. 'Oh dear, whatever is the matter with the street?' she exclaimed on getting into the open air. 'All the houses are moving about, and it's awfully uphill somehow, yet my feet keep dropping into some dreadful ditches!'

A SINGULAR EXPERIENCE.

By LUCY HARDY.



ITTLE did I imagine, when I accepted the invitation of my newly-made acquaintance to visit at his country house, what a singular and terrible experience was to befall me while under his roof. I had been weather-

bound at a small Swiss hotel, and had there fallen into friendly chat with the only other English visitor—a middle-aged gentleman, who, as I discovered in course of conversation, shared many of my peculiar tastes and hobbies, and also proved to be acquainted with some of my own friends. Intimacies ripen quickly in similar circumstances, and before parting I had received and accepted an invitation to pay my travelling companion a visit as soon as I returned to England—an engagement of which a note addressed to my club reminded me soon after I arrived in London.

I am an engineer by profession, and devoted to the study of mechanics in every form; my new acquaintance, whom I will call Mr Beltram, though 'a mere idle country squire,' as he called himself, was equally addicted to the same pursuit. Possessed of a comfortable private income, he had amused himself by travelling and studying mechanics en amateur (as George Selwyn did executions) until the death of an uncle, some six years previously, had placed him in possession of a small estate in the west of England, and of an old-fashioned country mansion, which

he had been amusing himself for some while past in altering and fitting up with his own inventions and arrangements. The house, indeed, though thoroughly comfortable in its appointments, was as full of whimsical surprises as was the mansion of the famous Winstanley (builder of the first Eddystone Lighthouse), where, 'if you sat in a certain chair, the arms clasped you around; . . . if you entered an arbour you found yourself affoat on a canal,' Bells could be rung by all manner of unexpected devices, and fountains in the garden set agoing from a distance; but what my friend chiefly prided himself upon was having erected a lift working on a principle of his own invention, which he conceived to be immeasurably superior to any yet in use. When the mechanism was fully explained to me I cannot say that I thought it differed very materially from that of most other similar contrivances; but my host was as pleased with his lift as is a child with a new toy; and I refrained from damping his enthusiasm by ill-timed criticisms.

I passed a couple of days agreeably enough in my new quarters. Mr Beltram, who was a bachelor, possessed an excellent housekeeper, cook, and cellar, and was a kindly and genial host, although fuller of eccentricities than I had perceived on our first acquaintance. He was a dabbler in many arts and sciences, had a laboratory on the ground floor and an observatory

on the roof of his house, but was, withal, a clever and highly-educated man, who had read much, travelled far, and seen the world in various ways. We lingered late in the smoking-room on the third evening of my visit, Beltram expounding a new idea by which he believed something akin to that philosopher's stone of mechanics, perpetual motion, could be discovered. I rather differed from his views, and we grew eager and excited, though in quite a friendly way, as we compared sketches and figures; continuing our discussion even in the lift, in which we were slowly rising to our bedrooms-it would have broken Beltram's heart had I suggested walking up the staircase. The lift was worked by the occupants, Beltram taking charge of it on this occasion, and halted mechanically for a moment or two at each floor we passed. A small landing, some four feet long by three and a half feet wide, met the lift at each of these halting-places; these small landings being closed at the other end by a door which gave entrance to the passage which ran along that floor of bedrooms. Like many oldfashioned country houses, the Manor was built with a huge square hall, having galleries round it, upon which the bedrooms opened. The lift had been erected in one corner of this hall, and was connected with the various floors by these small landings, underneath which the machinery of the lift was stored.

'Well, here's your floor,' said Beltram as the lift made one of its usual halts for a few moments, 'and so I'll say good-night. I'm going up to my observatory to have a look at the sky; there's a fall of stars predicted for to-night, and I mean to keep a lookout for them. I suppose you won't care to come up farther?'

'Thanks, no; I'm rather sleepy,' I replied, stepping out on the landing. 'I'll run over those figures again,' I called out as the lift swept upwards; 'but I really think you will find I am right regarding the pressure to the square inch.' But Mr Beltram had already soared away into space. The lift when once started could not, without a deal of complicated manœuvring, be arrested longer than a few moments at each halting-place, until it was finally at rest at the top of the building.

But there were certain (supposed) advantages connected with his improved lift which fully compensated for this rather inconvenient peculiarity, as Mr Beltram had carefully explained to me. I turned to the door which closed the landing, but, to my great surprise, I found that it would not open. I struggled vainly with the lock for a few moments, but it was certainly fastened upon the other side; and it then flashed upon me that, being engrossed in our argument, Beltram must have mistaken the floor, and put me out at a wrong landing—one probably opening on a disused floor of apartments; for the Manor was a roomy, rambling abode, and by far the larger pro-

portion of its rooms were unoccupied. Each of the doors which closed the small landings off the lift had a square of glass in its top panel outside, while in the passage an electric light was fixed.

As I stood in the narrow gangway I was therefore in the enjoyment of light—for a few moments! The sonorous old hall-clock struck twelve, and simultaneously with the last stroke I found myself plunged in total darkness—literally 'a darkness which could be felt'—the light on the other side of the door abruptly going out.

I remembered that this sudden extinction of the lights was one of my friend's many ingenious household contrivances, an apparatus (which could, of course, be disconnected if desired) connecting the clock and the electric arrangements, 'so that the lights are all switched off at midnight, which is quite late enough for any of the servants to be out of their beds,' Beltram had remarked to me; for my host, though a liberal and kindly master in the main, was rather a martinet in his household regulations, and as fidgety an old bachelor as ever existed. rule of 'lights out' had been explained to me upon my arrival; however, as my apartment was amply supplied with candles, it had mattered little to me-until now. But as I stood in the narrow landing, with an abyss below me on one side, I certainly 'longed for light' as earnestly as did ever Ajax!

The position was anything but a pleasant one. I knew that Beltram must be by this time stargazing from his observatory on the roof, too engrossed with his telescope to think of aught else, and also, of course, wholly unaware of the mistake which he had made. The servants were all probably in bed by this time, or at least quartered in a far-distant part of the house; so, although I shouted lustily for several minutes, until my throat was sore, I was well aware that there was not the slightest chance of any one hearing me. The landing-door was of good, solid oak, and would have resisted the efforts of half-a-dozen men to force it open. I remembered I had still some matches in my fusee-case; I struck one, and cautiously surveyed my sur-

I was standing, safely enough, with several feet to spare between myself and the darkness below; and yet, as I looked across that narrow strip of carpet, ending in a black, blank space beyond, I must confess that my heart began to beat and my head to swim. I was safe—quite safe, of course, as I told myself, and had only to wait patiently until the morning came, when I should be missed and sought for. To wait—it was now just midnight, and the Manor household was not an early-rising one. It would be fully other eight hours before Beltram's valet would bring the hot water to my bedroom, and discover that I was not there. Eight hours to wait on this narrow ledge, where a false step

might— I started at the disagreeable reflection, and in so doing dropped my match-box; it rolled along the landing, and then—but after a moment—I heard it strike the bottom of the well of the lift; and by the delay I knew I must be a very considerable height from the ground. If I too should fall over? I resolutely braced myself against this thought.

'What a fool I am!' I said aloud. 'I am safe —perfectly safe—as long as I keep against this door. It is most disagreeable of course, but

there is no danger-absolutely none.'

Some minutes went by. I was already tired, having made a long ramble on foot that day with my friend, and found my position, standing against the door, rather fatiguing. I would sit down, I thought, and did so. I am a tall man, over six feet in height; as I thoughtlessly stretched out my legs, one foot slightly slipped over. I was up again in a second, clinging to the doorhandle and trembling in every limb. That position was certainly not to be thought of. The absolute darkness, which seemed to press upon my eyeballs, the silence, the loneliness, were beginning to tell upon my nerves; and then a horrible thought occurred to me: 'What if I should become faint, and fall, too near the edge, as my match-box had done?'

I am not ashamed to confess that this thought turned me sick with dread. I roused myself, however, and stood again closely against the door; but after a while such absolute weariness overpowered me that I was compelled to sit down, keeping crouched together, and packing my inconveniently long limbs into as small a compass as possible. I took the additional precaution of fastening my wrist by my hand-kerchief to the handle of the door, and then prepared to wait for the day as best I might.

I resolutely reasoned out the position with myself. The danger was a purely imaginary one, I argued again and again, speaking aloud to have the comfort of hearing some sound amid that awful stillness and darkness. I even tried to whistle a tune, but the echoes gave back so strange and reverberating a sound that I abruptly desisted. So the time crept by—was it hours or days?—and I began to grow chilled and cramped in my constrained position. But I dared not stretch my limbs again. I would not risk such another shock as I had recently received when my foot had slipped over the edge of the landing.

My head now began to grow dizzy, strange whispers seemed to echo in my ears, and faces—mocking, evil faces—appeared to rise out of the

dark abyss beyond and grin at me.

There is a gruesome story of Erckmann-Chatrian's which describes a certain haunted room, whose occupants are irresistibly compelled to commit suicide. As I sat cowering in the darkness, I began to feel a horrible impulse growing upon me to plunge forward—and—— I fought against

it steadfastly, but the voices seemed to surge round me louder and louder, and hands seemed to beckon—even to drag me forward. I shrieked in my despair—and yet I felt convinced that presently I must yield. Yes, it would be easier to do so. And I took a step forward.

'Are you better now? I shall never, never forgive myself for being such a fool.' Such were the words which fell upon my ears as I opened my eyes to find myself lying-not at the bottom of the lift, but in the passage—the centre of an excited group of servants in various stages of dress and undress, while Beltram, with a countenance of the deepest concern, was kneeling by my side, holding brandy to my lips, and alternately begging my pardon and execrating his own folly for the mistake which he had made-a mistake which might certainly have had very tragic consequences for me. But the good fellow was blaming himself so severely that no one could be churlish enough to add to his self-reproaches. It had luckily happened that the expected shower of meteors had proved such a brilliant one that my host had hurried off to my bedroom to call me to share in the spectacle. Not finding me there, nor in any of the living-rooms, the idea that he had put me out at a wrong landing flashed upon his mind; rousing the servants, he had hastily run to all the doors opening upon the lift, and found me-just in time.

And, after all, I had been imprisoned for barely a couple of hours, although it had seemed like an eternity; and the danger was always more imaginary than real. But our imaginations can often play strange tricks with our nerves, as I had learnt during that night's adventure.

TO A MODERN PORTIA.

To-day among a crowd I passed,
And 'mid the faces gay or sad
I sought for one to make me glad;
And, seeking, gazed on yours at last.

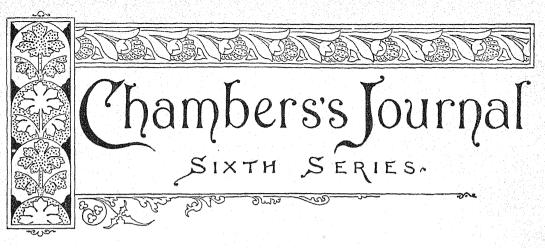
Your eyes, whose glance of pleasure told, Within me woke a sudden thrill; And yet I dared not gaze my fill, Lest you should think me over bold.

But, glancing often as I dare,
Oh! what a lasting joy was mine
To see a face so near divine,
So sweet, and more than passing fair!

For, lo! at once in you I found
The lovely soul for whom I yearned;
And in your slender form discerned
A queen of women, though uncrowned;

A truthful creature, chaste and pure; A woman one might die to kiss; Not too reserved for human bliss, Yet strong to suffer and endure.

SAM WOOD.



MOUJIK AND HIS HOME.

By FRED WHISHAW.



AR ALEXANDER the Liberator, by the exercise of his autocratic authority, changed the Moujik from a quasi slave into a bona-fide landowner and peasant proprietor. The former owners of Ivan Ivanitch

(which is the familiar name by which the peasant classes are known in Russia) were, naturally enough, dissatisfied; for they were deprived by a single stroke of the pen of land and free labour, receiving little in return. As for Ivan Ivanitch, one would suppose that he would have shown a proportionate sense of delight, for he was, one would think, as much a gainer as the lord of the manor was a loser. But in many instances the reverse was the truth.

As a serf, Ivan had been, in a sense, personally conducted through life by his master. When his lord was a respectable sort of person-as was frequently the case, in spite of the general belief among Englishmen that the serf was systematically down-trodden and persecuted by his master, the lord of the soil-his lot was a fairly happy one. It did not pay to allow him to starve or die; for, according to the old dispensation, the Moujik was obliged to work for his lord two, three, or four days in every week, or else to pay the equivalent in coin of the realm. Therefore he was kept alive and well fed. If he fell ill, there was a doctor to cure him and a manor-house from which a watchful eye was kept upon his welfare; his life was valuable to the proprietor of the soil, and so was that of his wife and children. All felt that the lord of the manor was at their back, and that it paid him to look after them; and this feeling gave them a sense of security. In some parts of the country, serfs and lords formed a happy family, of which the proprietor was the head and father, and the Moujiks his children; the entire village looked to the manor-house for guidance in all the affairs of life. Many of

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received good wages; marriages were arranged by the head of the community; each man was employed to do that kind of work for which Nature had specially adapted him. The head assisted the members, and the members were in entire sympathy with the head, and all went happily and propitiously. For such a community, the emancipation of the serfs was by no means an unmixed blessing. The lord now became an absentee, and was estranged from his old Moujik children; he could no longer afford to live in his countryseat, and rarely visited it. The peasants had now to look after themselves. Theoretically they should have been able to do this well enough; for, according to the new dispensation, each of them suddenly found himself the happy proprietor of far more than the proverbial 'three acres;' while, as for the cow, many already possessed not one but half-a-dozen of these useful animals. Naturally enough, those who had lived under a grinding or cruel landlord were glad to be rid of him and to be their own absolute masters; but many had been in sympathy with and dependence upon their old proprietors, and felt lost and insecure under the new conditions of life. They knew well enough that they were incapable of managing for themselves without a head to look after them and see that they did not drink themselves into a condition of incapacity every day of the week.

However, the flat went forth; and, whether Ivan Ivanitch liked it or not, he was a peasant proprietor, and must make the best of it; and, to tell the honest truth, as a matter of fact, Ivan generally makes a very poor business of it indeed. It is not that his share of land will not support him; it will support him well enough if he goes the right way to enable it to do so. But there are certain inveterate enemies of Ivan Ivanitch which arise and confront him, and prevent his progress and prosperity, because it the peasants acted as domestic servants, and | is not in the Russian character to resist them. [All Rights Reserved.] APRIL 23, 1898.

The first of these is his unconquerable aversion to work of any sort. The Russian calendar is full of saints' days and of holidays of every kind; and Ivan would sooner see his hay or his oats rot upon the ground than do a stroke of work upon any day which offers the smallest canonical excuse for remaining idle. Then there is 'the drink.' This is the darling vice of the country, and the real cause of the poverty of the peasant classes, and of half the misery that exists throughout the land.

The fields remain half-cultivated because Ivan cannot spare the time to go out to work, and his really exemplary wife cannot do it all, though she does her best, because of the small children at home, of whom she has any number from three to a dozen. As for Ivan himself, he is in the kabak or drinking-shop, and cannot be expected to tear himself away for any very prolonged period, for all his friends are there, and why should he be the exception?

If any money comes in—by the sale of hay, or oats, or milk, or anything else—the monopolist who keeps the village drinking-shop knows well enough what becomes of it; so perhaps does Ivan; but it is quite certain that poor, patient, hard-working Masha, his wife, and the small children, see nothing of it. They have their lump of black bread for dinner, and perhaps a particle of the same is left over for supper, and that is good enough for them. Ivan lives on vodka chiefly, and leaves most of the rye-bread for his family; but occasionally he indulges in a wooden bowlful of schee, which is a kind of cabbage soup, or toys with a trifle of salted herring. He is no great eater.

Let me describe, briefly, the village life of a Russian peasant proprietor; for theoretically the system is excellent, though the practice is spoiled by the idleness and drunkenness of the Monjik himself

In the first place, I may state, as a curious paradox, that though Russia is presumably the most autocratically governed state in the civilised world, yet each and every village in the Tsar's dominions is a complete and compact little democracy in itself, managing its own affairs without interference from the outside, and managing them, too, with complete and almost unvarying success, in a manner peculiarly its own, and in many ways decidedly worthy of imitation.

The community starts with the data that a certain amount of land is apportioned by authority for the use of the village, and that a certain tax must be paid by the inhabitants into the state coffers as the equivalent. The question is, how to divide the land so that all may have a fair share, and how to divide the tax so that each proprietor may pay according to the benefit derived by him from the communal land. First, then, it is necessary to elect a committee to deal with this question, and to place at the

head of the committee a chief who shall be its mouthpiece and administrator. The committee is easily settled. Each adult male who is old enough to work and to accept a share of land for cultivation becomes a member of it; and the body of men thus selected are called the Souls of the Village. They are the peers, and constitute the Mir or world-by which modest designation they style their own community. One of themselves is elected each two or three years, and is called the Starost or Elder, and the council is complete. Then this Mir proceeds to settle the affairs of the community; the most important of which, by far, is the distribution of the land, which is done periodically-once in every two or three years, and is revised by the state inspectors once in fifteen or so. This is a matter in which it is, of course, exceedingly difficult to please all parties. For, if the land be of good, productive quality, of a kind which gives excellent results for a minimum of labour, each person entitled to a share is clamorous for his full rights, and is not happy until he gets them. Every male who is old enough to work is nominally entitled to his share, and consequently-when the land is good-the Mir has a very delicate business before it in settling the claims of those fathers or widow-mothers who possess sons old enough to claim their full share of the communal soil. Such fathers are, of course, themselves members of the apportioning committee, and this makes the settlement a still more delicate question.

The matter is no less difficult when the land is unproductive, and the object of each person is to claim as little of it as possible. Under such circumstances it is wonderful how modest each family shows itself in estimating its own working capacity. The same able-bodied family group which would have clamorously insisted upon being provided with seven shares of good land will now tearfully protest that one share is all it can possibly cultivate; the fact being that when the land is good all will work at it, and it will even pay to engage labourers, if necessary; while, if it be bad and poor, it will pay the family better to send some few members to work for wages in the towns, while one, or perhaps two, remain at home to cultivate the smallest share of land that the Mir can be induced to allot to them: the principal object being to avoid as much as possible of the tax by undertaking as little as possible of the communal land. But gallantly as each family will fight for its rights while the distribution of the land is still in suspense, no one thinks of disputing the ruling of the Mir once the decision has gone forth. When that has happened the Moujiks go out and make the best of their lot, and those who drink a great deal will starve with their families on the best of land, and those who are moderate will do well enough.

If there be a total abstainer in the district (a rara avis indeed!) he may easily become a rich man, especially if he has many sons and the land is fairly good. But, however rich he may become, the Moujik never raises the standard of civilisation and comfort (or rather barbarism and discomfort) in which he lives, and in which his fathers have lived for hundreds of years. As they lived and fed, so he feeds and lives; his occupation is upon the land, his relaxation in the drink-shop. His traditions are his ancestors', and he does not desire to change them. He would not care to dress better, or to use soap, or to possess a bed to sleep upon instead of the top of his stove. He would not know what to do with a house of more than one room; a washstand would amuse and bewilder him; fresh air (even in summer) in his living room would kill him; he would sooner perish than breathe it. He is the most unbending of conservatives, and would not change or improve his surroundings were he ever so rich.

The Emperor Alexander II. was once indebted to a peasant for saving his life. The Moujik had observed a man raise a pistol as the Tsar passed; and, imagining that the assassin intended to shoot, not the Tsar, but himself, he jogged

his arm. As a matter of fact the pistol was aimed at the Tsar, and the fortunate or unfortunate peasant received a gratuity of several thousand pounds for the service he had rendered to his sovereign. That Moujik went home and drank himself to death quicker than that process had ever before been accomplished, and so—under similar circumstances—would ninety-nine out of every hundred of his brethren throughout Russia.

Nevertheless, education is making good strides in the country of this tipsy peasantry; and it may be hoped that the children of the present generation of hard-drinking 'Souls' may be taught to recognise that there are other and higher ideals of amusement than that of their fathers and forefathers, which was and is to sit in the drinking-shop until the vodka has so befuddled their foolish brains that they are unfitted for the healthy work of the fields, and who, therefore, put in, on an average, but half-a-day's real labour out of every possible six working days. Let every well-wisher hope that such a day of enlightenment may soon arrive; for the Russian peasant would be a capital fellow if only he would drink less and wash more, and-even occasionally-speak the truth.

JOHN BURNET OF BARNS.

CHAPTER XXV. -- OF OUR WANDERINGS AMONG THE MOORS OF CLYDE.



there had been haste before in our journey there was the more now, when in a few hours the countryside would be alive with our foes. I hurriedly considered in my mind the course of events.

In three hours' riding the soldiers would come to Abington, and in three more the road to Douglasdale would be blocked by a dozen companies.

We were not long in reaching the cave. Here, to my joy, I found Marjory all recovered from her fright, and the wound hurting her no more than a pin's scratch. When I spoke of immediate progress she listened gladly and was for setting out forthwith. I did not tell her of the soldiers' discomfiture, for I knew that she would fall to chiding me for my foolhardiness, and besides she would have more dismal fears for my future if she knew that I had thus incensed the military against me.

It was with much regret that I bade farewell to Master Lockhart and the old man; nor would they let me go without a promise that if I found myself hard pressed at any time in the days to come I would take refuge with them. So amid the speaking of farewells and well-wishes we rode out into the green moors.

We crossed the river without slacking rein, for the water scarce reached above our horses' pasterns. And now we struck up a burn called the Badlieu, at the foot of which was a herd's sheiling. The spirit of the spring seemed to have clean possessed Marjory, and I had never seen her so gay. She, who was for usual so demure, now cast her gravity to the winds, and seemed bent on taking all the joys of the fair morning. She laughed, she sang snatches of old songs, and she leaped her horse lightly over the moss-trenches. She stooped to pluck some early white wind-flowers, and set some in her hair and some at her saddlebow.

'Nay, John,' she cried, 'if you and I must take to the hills let us do it with some gallantry. It is glorious to be abroad. I would give twelve months of sleepy peace at Dawyck for one hour of this life. I think this must be the Garden of Endless Youth in the fairy tale.'

The same mad carelessness took hold on me also. Of a sudden my outlook on the world changed round to the opposite, and the black forebodings which had been ever present to distress me seemed to vanish like dew before the sun. Soon I was riding as gaily as she; while Nicol, as he ran with great strides and unfaltering breath, he too became light-hearted,

though to tell the truth care was not a commodity often found with him.

Soon we had climbed the low range which separates the Clyde glen from the Tweed, and turned down the narrow ravine of the burn, which I think they call Fopperbeck, and which flows into the Evan Water.

We kept over the rocky ravine through which the little river Evan flows to Annan, and came to the wide moorlands which stretch about the upper streams of the Clyde. Here we had a great prospect of landscape; and far as eye could see no living being but ourselves moved in these desolate wastes. Far down, just at the mouth of the glen where the vale widens somewhat, rose curling smoke from the hamlet of Elvanfoot, a place soon to be much resorted to and briskly busy, since it is there that the by-path goes off leading to the famous lead-mines at the two places of Leadhills and Wanlockhead. But now it was but a miserable roadside clachan of some few low huts, with fodder for neither man nor beast.

As we rode we looked well around us, for we were in an exceeding dangerous part of our journey. To the right lay Abington and the lower Clyde valley, where my sweet cousin and his men held goodly fellowship. To the left was the long pass into Nithsdale, where half-a-score of gentlemen did their best to instil loyalty into the Whigs of the hills. I hated the land to that airt, for I had ever loathed the south and west countries, where there is nought but sour-milk and long prayers, without a tincture of gentrice or letters. I was a man of Tweeddale, who had travelled and studied and mingled among men. I had no grudge against sheltering with the Tweedside rebels, who were indeed of my own folk; but I had no stomach for Nithsdale and Clydesdale rant and ill fare. Had not necessity driven me there, I vow I should never have ventured of myself; and as I rode I swore oftentimes that once I were free of my errand, I would seek my refuge in my own countryside.

And now we were climbing the long range which flanks the Potrail Water, which is the larger of the twin feeders of the Clyde. Again we turned more to the north, and, skirting the wild hills which frown around the pass of Enterkin, sought the upper streams of the Duneaton Water. After crossing a little burn called, I remember, the Snar, which flowed very quietly and pleasantly in a deep heathery glen, we halted and suffered our horses to graze, while we partook of some of the food which the folk of the Cor Water had given us. Now the way which we had come had brought us within seven miles of the dragoons' quarters at Abington, for it was necessary to pass near them to get to Douglasdale and Smitwood. But here in this narrow glen we were in no danger save from some chance, wandering soldier. This danger was the less to be feared since, if

Gilbert had any large portion of his men out on one errand, he would be sure to set the rest to their duties as garrison. For my cousin had no love for lax discipline, but had all the family pride of ordering and being obeyed to the letter. So we kindled a little fire by the stream-side, and in the ashes roasted some eggs of a moorfowl which Nicol had picked up on the journey; and which with the cheese and the cakes we had brought made a better meal than I might hope for for many a day to come. Marjory was somewhat less cheerful than in the morning, partly from the fatigue of riding, which in these waste places is no light thing, and partly because anxiety for my safety and sorrow at our near parting were beginning to oppress her. For herself I verily believe she had no care, for she was brave as a lion in the presence of what most women tremble at. But the loneliness of a great house and the never-appeased desire for knowledge of my safety were things which came nearer so rapidly that I did not wonder she lost her gaiety.

'Oh what will you do alone in these places?' she said. 'If you had but one with you, I should be comforted. Will you not let Nicol

accompany you?'

Now when my lady looked at me with melting eyes and twined her hands in her eagerness, it was hard to have to deny her. But I was resolved that my servant should abide at Smitwood to guard her and bring me tidings if aught evil threatened.

'Nay, dear,' I said, 'that may not be. I cannot have you left with an old man who is helpless with age and a crew of hireling servants. I should have no heart to live in the moors if I had not some hope of your safety. Believe me, dear, I can very well defend myself. My skill of hilleraft is as good as any dragoon's, and I have heard folk say that I am no ill hand with a sword. And I know the countryside like the palm of my own hand, and friends are not few among these green glens. Trust me, no ill will come near me, and our meeting will be all the merrier for our parting.'

I spoke heartily, but in truth I was far from feeling such ease of mind. For my old cursed pride was coming back, and I was beginning to chafe against the beggarly trade of skulking among the moors when I had a fine heritage for my own, and above all when I was a scholar and had thoughts of a peaceful life. I found it hard to reconcile my dream of a philosophic life, wherein all things should be ordered according to the dictates of reason, with the rough-and-ready times which awaited me, when my sword must keep my head, and my first thought must be of meat and lodging, and cunning and boldness would be qualities more valuable than subtle speculation and lofty imagining.

In a little we were rested and rode on our way.

Across the great moors of Crawfordjohn we passed, which is a place so lonely that the men in these parts have a proverb, 'Out of the world and into Crawfordjohn.' We still kept the uplands till we came to the springs of a burn called the Glespin, which flows into the Douglas Water. Our easier path had lain down by the side of this stream past the little town of Douglas. But in the town was a garrison of soldiers-small, to be sure, and feeble, but still there-who were used to harry the moors around Cairntable and Muirkirk. So we kept the ridges till below us we saw the river winding close to the hill and the tower of Smitwood looking out of its grove of trees. By this time darkness was at hand, and the last miles of our journey were among darkening shadows. We had little fear of capture now, for we were on the lands of the castle, and Veitch of Smitwood was famed over all the land for a cavalier and a most loyal gentleman. So in quiet and meditation we crossed the stream at the ford, and silently rode up the long avenue to the dwelling.

CHAPTER XXVI. -- I PART FROM MARJORY.

VE travelled far and seen many things; but, Gad! I never saw a stranger than this. My niece is driven out of house and home by an over-bold lover, and

you, Master Burnet, come here and bid me take over the keeping of this firebrand, which, it seems,

is so obnoxious to his Majesty's lieges.'

So spake the old laird of Smitwood, smiling. He was a man of full eighty years of age, but still erect with a kind of soldierly bearing. He was thin and tall, and primly dressed in the fashion of an elder day. The frosty winter of age had come upon him; but in his ruddy cheek and clean-cut face one could see the signs of a hale and vigorous decline. He had greeted us most hospitably, and seemed hugely glad to see Marjory again, whom he had not set eyes on for many a day. We had fallen to supper with a keen appetite-for the air of the moors stirs up the sharpest hunger; and now that we had finished, we sat around the hall fire enjoying our few remaining hours of company together. For myself, I relished the good fare and the warmth, for heaven knew when either would be mine again. The high, oak-roofed chamber, hung with portraits of Veitches many, was ruddy with firelight. Especially the picture in front of the chimney by Van Dyck of that Michael Veitch who died at Philiphaugh, was extraordinarily clear and life-like. Master Veitch looked often toward it; then he took snuff with a great air of deliberation, and spoke in his high, kindly old

'My brother seems well to-night, Marjory. I have not seen him look so cheerful for years.' (He had acquired during his solitary life the

habit of talking to the picture as if it were some living thing.) 'I can never forgive the Fleming for making Michael hold his blade in so awkward a fashion. Faith, he would have been little the swordsman he was if he had ever handled sword like that. I can well remember when I was with him at Etzburg, how he engaged in a corner two Hollanders and a Swiss guard, and beat them back till I came up with him and took one off his hands.'

'I have heard of that exploit,' said I. 'You must know that I have just come from the Low Countries, where the names of both of you are still often on men's lips,'

The old man seemed well pleased.

'Ah,' he said, 'so you have come from abroad. In what place did you bide, may I inquire?'

'In the town of Leyden,' said I; 'for my aim was no more than to acquire learning at the college there. But I foregathered with many excellent Scots gentlemen, from whom I heard the talk of the camp and the state.'

'Say you so? Then, what do you here? Did you return on the single errand of protecting my fair niece? But stay! I am an old man who cares not much for the chatter of the country, but I have heard—or am I wrong?—that you were not of the true party, but leaned to the

Whigs ?'

'Nay,' I cried, 'I beseech you not to believe it. God knows I am a king's man out and out, and would see all whigamores in perdition before I would join with them. But fate has brought me into a strange mixture of misfortunes. I land at Leith, expecting nothing save a peaceful homecoming, and, lo! I find my cousin waiting with a warrant for my arrest. I am accused of something I am wholly innocent of; but I cannot prove it; nay, there is evidence against me, and my enemies in the council are all-powerful. Moreover, if I suffer myself to be taken, Marjory is at the mercy of my foes. I take the only course: give the dragoons the slip, and ride straight to Tweeddale, escort her to a house where she will be safe and unknown, and when this is done take to the hills myself with a light heart. They are too ill-set against me for setting any hope in going to Edinburgh and pleading my case. Was there any other way?'

'None,' said Master Veitch. 'But it is a hard case for yourself. Not the hiding among the moors—that is a noble trade for any young man of spirit; but the consorting with the vile fanatics of these deserts must go sore against your heart.'

Now I, who had just come from the folk of the Cor Water, had no such dread of the hillmen, but I forbore to say it; for Master Veitch had been brought up in one school, these men in another. Both were blind to the other's excellencies; both were leal-hearted men in their own ways. It is a strange providence that has so ordered it that the best men in the world must ever remain apart through misunderstanding.

'But to come to my errand,' said I. 'I have brought you your niece for protection. You are a king's man, a soldier, and well-known in the countryside. It is more than unlikely that any troops will come nigh you. Nor is it possible that the maid can be traced hither. I ask that you suffer her to abide in the house, while I take myself off that there be the less danger. And, oh! I beseech you, do not refuse me. She is your own flesh and blood. You cannot deny her shelter.'

The old man's face darkened. 'You take me for a strange kinsman, Master Burnet,' he said, 'if you think I would refuse my best aid to a kinswoman in distress. Do you think that you are the sole protector of my house?'

I bowed before his deserved rebuke.

'But for certain, Marjory may abide here as long as she will,' he added cheerfully. 'We will do our best to entertain her, though I am too old to remember well the likings of girls. And if any one comes seeking her on errand of no good, he will learn that William Veitch has not lost the use of his arm.'

'May I ask,' said I, 'that my servant be allowed to stay. He knows the hills as scarce any other living man, and he is faithful and clever as you would hardly believe were I to tell you. With him in the house I should have no fear for its safety.'

'So be it,' said the old man. 'I will not deny that my servants are not so numerous nor so active that another would not be something of an improvement. Has he any skill in cooking?' This he asked in a shamefaced tone, for old as he was he had not lost his relish for good fare.

'I will ask him,' said I; and I called Nicol

from the servants' quarters.

'Your master gives me a good account of you,' said the cracked voice of the laird of Smitwood, 'and I would fain hope it is true. I wish to interrogate you about—ah, your powers—ah, of cooking pleasing dishes,' and he waved his hand

deprecatingly.

'Oh, your honour, I am ready for a' thing,' said Nicol. 'Sheep's heid singit to a thocht, cocky-leeky, and a' kind o' soup, mutton in half-a-dozen different ways, no' to speak o' sic trifles as confections. I can cook ye the flesh o' the red-deer, and the troots frae the burn, forbye haggis and brose, partan-pies, and rizzard-haddies, crappit-heids, and skate-rumples, nowt's feet, kebbucks, scadlips, and skink. Then I can wark wi' custocks and carlings, rifarts and syboes, farles, fadges, and bannocks, drammock, brochan, and powsowdie.'

'That will do; you may go,' said the old man, rubbing his hands with glee. 'By my word, a genuine Scots gastronome, skilled in the ancient dishes of the land. I anticipate a pleasing time while he bides here.'

get over his delight in the project of my servant's presence. Even after he had gone he sat and chuckled to himself, for he was known among his friends to have a fine taste for dainties. Meantime the light was dying out of doors, and more logs were laid on the fire till it crackled and leaped like a live thing. I have ever loved the light of a wood-fire, for there is no more heartsome thing on earth than its cheerful crackle when one comes in from shooting on the hills in the darkening of a winter's day. Now I revelled in the comfort of it, since on the morrow I would have no other cheer than a flaming sunset.

So we sat around the hearth and talked of

It was long ere the worthy gentleman could

many things till the evening was late. The old man fell to the memories of former folk, and told us tales of our forebears as would have made them turn in their graves could they have heard them. Of my house he had scarce a good word to speak, averring that they were all 'scape-thegallows, every one, but gallant fellows in their way. 'There was never a Burnet,' he cries, 'who would scruple to stick a man who doubted his word, or who would not ride a hundred miles to aid a friend. There were no lads like the Burnets in all the countryside for dicing and feasting and riding break-neck on the devil's errand. But, Gad! if they were stubborn as bulls when they were down themselves, they were as tender as women to folk in trouble.'

'There's one of their name like to be in trouble for many days to come,' said I.

'Meaning yourself? Well, it will do you no ill. There's naught better for a young man than to find out how little the world cares whether he is dead or alive. And above all, you that pretend to be a scholar, it will ding some of the fine-spun fancies out of your head. But for the Lord's sake, laddie, dinna get a bullet in your skull, or you'll have me with all my years taking the field to pay back them that did it.' He spoke this so kindly that I was moved to forget the first half of his words through the excellency of the latter. In truth I much needed the rough lessons of hardship and penury, for at that time I was much puffed up in a self-conceit and a certain pride of letters as foolish as it was baseless.

'I must be off in the morning before the dawning, for I have to be on the hills ere the soldiers get abroad. I must beg of you not to disturb yourself, Master Veitch, for my sake, but just to bid them make ready for me some provisions; and I will slip off ere the household be awake. It is better to say farewell now than to have many sad leave-takings at the moment of departure. I have no fear of my journey, for my legs are as good as any man's, and I can make my hands keep my head. Also, my mind is easy since I know that Marjory is safe here.'

'Then I will even bid you good-bye, John,' said he, 'for I am an old man, and keep early:

hours. If you will follow me, I will take you to your chamber.—Alison will take you to the old room, Marjory, where you have not been since you were a little lass scarce up to my knee.' And with obvious intent he walked out.

'God keep you, John,' my dear lass whispered on my shoulder. 'I will never cease to think of you. And oh! be not long in coming back.'

And this was the last I saw of my lady for many days.

VISITORS FROM SPACE.



HE round earth upon which our lives are passed is surrounded by an envelope of air which, a few miles from the surface, becomes so attenuated that life can no longer be supported in it. A few years ago some

daring aeronauts rose to a height of nine miles in this thin medium, nearly losing their lives as a reward for their temerity; and it is a matter of common knowledge that this attenuation of the air is the most serious obstacle to progress with which mountaineers at high altitudes have to contend. Hence, it is obvious that we are confined to this earth by a barrier which, 'light as air' though it be, is as effectual as if it were composed of solid metal.

But although none of us can get away from this earthly prison to visit those other worlds which astronomy teaches are circling round about our own, the reception by us of visitors from space is by no means an uncommon occurrence. These strangers take the form of stones or masses of metal called meteorites, which have for convenience been arranged in three classes. The first consist mainly of iron, and are called siderites; the second class consist of iron and stone, and are known as siderolites; and the third class, being wholly or chiefly composed of stony matter, are called aërolites. In addition to iron, some twentyfive elementary substances such as are found in the earth's crust have been detected by analysis in meteorites; and up to the present no body unfamiliar to chemistry has been discovered in them.

Up to the beginning of the present century the fall of these stones from the sky was a matter of tradition in which very few believed. There were vague ideas as to the possibility of thunderbolts falling to the earth from the clouds, born, no doubt, of the terror excited by the noise and tumult of a storm and of the fatalities connected with lightning-stroke combined. But the fall of solid matter from the sky—except as thunderbolts—was a superstition woven from tradition and the exaggeration of some of the old historians.

Such traditions are numerous, the most ancient record of the kind being found in the tenth chapter of the book of Joshua, in which we read of great stones being cast down from heaven, and many men being slain by them. Possibly hailstones may here be referred to, but there are other records in which actual stony matter is indicated. Thus, in Livy's History of Rome is found an account of a rain of stones which was regarded with such awe that a nine days' festival was ordered by the senate. The fall of a stone from the sky has often been regarded by semi-civilised peoples as such a miraculous occurrence that the object itself has become a kind of fetich or subject of adoration. The most recent instance of the kind may be found in the records of the Geological Survey of India for 1885, where we are told that a meteoric stone which had recently fallen in that country was regarded with the greatest veneration, being decked with flowers, anointed with oil, or rather ghee (clarified butter), and dusted with sandalwood powder, a shrine being erected over it in the place where it fell.

At the close of the last century the German philosopher Chladni—to whom the world is indebted for some valuable researches and experiments with regard to sound—collected a mass of evidence with regard to the fall of sky-stones; and boldly stated, in opposition to the general scientific opinion of the day, his belief that such bodies came from space. He showed how many of these objects had been picked up at the top of mountains or in other situations where nothing of the same metallic composition could be found; and although some had asserted that such stones might have been ejected from volcanoes, he pointed out that they were found where volcanoes were only conspicuous by their absence.

But Chladni's theory was altogether discredited. although shortly after its enunciation there was a remarkable fall of stones at Siena, in Tuscany. This shower happened to occur during a violent thunderstorm and about eighteen hours after an eruption of Vesuvius; so that those who paid no heed to Chladni's reasoning were able to put forward two theories of their own. One was that the stones were generated in the igneous mass of clouds which produced such unusual thunder; and the other was that Vesuvius, two hundred and fifty miles away, had shot these missiles from its subterranean recesses. This latter idea was shortly after improved upon by the notion that stones from the sky were formed by a condensation of the ashes and mineral matter which form dense clouds above volcanoes during a period of activity.

At length, a labourer working in the fields near Scarborough, Yorkshire, saw to his dismay a stone fall close to him, and bury itself in the ground. This occurrence took place on a fine afternoon in December 1795. The stone weighed half-a-hundredweight, and on contact with the earth pierced twelve inches of soil and six inches of chalk rock. The observer of this phenomenon was possibly too terrified to note anything but the fall of the stone; but those in the near neighbourhood heard a series of explosions like the firing of guns at sea, and hastened to the spot to ascertain the cause. A few years later a shower of stones at a place near Benares, in India, was preceded by the appearance in the sky of a ball of fire and an explosion like thunder. Fragments of the Yorkshire stone, of those others from India, as well as bits of two more which had fallen at other widely - separated places, were analysed, and showed such remarkable points of agreement that the subject was brought before the Royal Society (London) in 1802 by Edward Howard, who strongly favoured the opinion that the stones had their origin outside the earth.

A year later a big shower of stones occurred in France, and the well-known scientist Biot was directed by the Minister of the Interior to visit the district where the occurrence had happened, and to report upon the subject. He reported that on a certain date, at one o'clock in the afternoon, in the neighbourhood of L'Aigle (in the department of Orne), a violent explosion lasting several minutes was heard for a distance of seventy-five miles around; that just previously a fireball in quick movement was seen from many adjacent towns and villages, and that many stones fell on the same day. The report of M. Biot was far too complete and circumstantial to be lightly regarded, and it compelled even those who had laughed at Chladni's theory to turn round and acknowledge that they had been wrong. From this date, 1803, the fact has never been questioned that masses of solid matter-stony, metallic, or mixed in composition-occasionally fall from the sky, and often in such clear weather that they may fairly be described as 'bolts from

One of the latest events of the kind was the explosion and fall of stones which occurred at Madrid on 10th February 1896. This happened on a fine morning, and the explosion seemed to come from a rapidly-moving cloudlet in the blue sky. The description is probably correct, for it agrees with what is taken as the accepted theory with regard to these visitors from the heavens. Whatever be their origin, it would seem that these solid bodies are hurtling through space at velocities which may be anything between ten and forty miles a second. If they come near enough to this earth to be attracted by it, their course is changed, and presently they enter our atmosphere. The result is a sudden check to their speed, owing to the intense resistance and friction engendered by contact with the air particles. What happens may be likened to the

sudden application of the wooden brake-block to the rapidly-moving wheel of an express train. Heat is generated in exchange for motion, and the trail of sparks from the checked wheel is represented in the checked meteorite by a luminous trail. We commonly call it a shooting-star; and if its mass be small it is possibly altogether dissipated in heat and gas-or it may ultimately find its way to our earth as dust. Such 'meteoric dust' has been found on the eternal snow of mountains, where dust of the ordinary type would be impossible. If, on the other hand, the mass of matter be large, its surface only will be affected by the sudden heat generated, and it may fall to the ground entire, or possibly-as in the case of the Madrid stone-may explode and be scattered in fragments over a wide area.

Many are the theories which have been advanced to account for the origin of meteors and shooting-stars, taking meteors to mean the larger and more prominent of these moving bodies, and shooting-stars to represent those smaller ones which for a brief moment attract the observer's notice. Some have held that they are ejected from the sun itself, but we can hardly reconcile this with the undoubted fact that many of the bodies found are combustible in their nature. The moon has also been credited with ejecting these stony masses from its volcanoes; but as far as we know there are no active volcanoes in the moon now, whatever might have been in the past. Even supposing that once upon a time the queen of night threw these missiles at us, the chance of hitting the earth would be very small, and the chance of such missiles, after missing us, ever coming into our neighbourhood again is too remote to be seriously considered.

Sir Robert Ball has pointed out that if we want to give a volcanic origin to meteoric stones it is much easier to believe that they were ejected in bygone times from terrestrial volcanoes, for in that case they would naturally take up a path round the sun which would intersect the earth's orbit. Whenever, therefore, the earth touched this particular point in her annual journey, the presence of some wandering meteorite might be rendered apparent by contact with our atmosphere. Still, there remains the potent argument that the many volcanoes on the earth do not eject stones or metallic masses of the composition peculiar to meteorites. For, long after the extra-terrestrial origin of meteorites was conceded, it was believed that the smallar bodies, or shooting-stars, were generated in our atmosphere; but the occurrence of meteor swarms at recurring periods, and the establishment of their close connection with comets, demolished the idea.

A question of absorbing interest arises with the endeavour, hitherto abortive, to find out the origin of these masses of matter. Do they bring with them evidence of the existence of living beings in those realms of boundless space from

which they come? Do they, in other words, tell us anything about the possibility of life on other worlds than ours? The answer must be in the negative. The presence in certain meteorites of carbon compounds, which might be the indirect result of animal or vegetable life, at one time gave credence to the idea that we here had

proofs of life on other spheres; but it has since been pointed out that such compounds are present only in the pores of the stone, and can be removed without breaking it up, indicating that such products may have been gathered in a gaseous state as it tore through our atmosphere.

'SANTA ANNA.'

CHAPTER IV.



OR the next few days, perhaps the angriest woman in London was Lady Maplehurst. She had made light of the danger threatening her liege; she had a hazy idea that no minion of the law would dare to

lay hands upon an earl. After the first flood of tears she hardened herself for the fray.

She had read somewhere that a peer was free of arrest for anything short of a capital offence, a point on which the family lawyer speedily undeceived her. As a matter of fact, Maplehurst was no hereditary legislator, and even a noble duke was not free where contempt of court was concerned. Did not a certain duchess a while ago taste the indignity of Holloway for the same thing?

It was scant comfort for Lady Maplehurst that her husband had his own apartment, and that he could partake of regular and well-cooked meals provided that he paid for them himself. She began to lose faith in the blandishments of sister Lucy, and to regard the Lord Chancellor as a heartless philanderer. Meanwhile the Privy Council preferred to dally with puerile matters of state, and the Queen still remained at Balmoral, utterly indifferent to the sufferings of the noble lord, whose ancestors had bled for the crown.

'How long is it likely to last?' her ladyship asked with the calmness of despair.

'Well—er—I don't apprehend his lordship will be released for at least a fortnight,' said the lawyer blandly. 'Fortunately a voluntary settlement of all your money has been made on you by Lord Maplehurst. This is, of course, all in his favour. We'll make an application on Friday week.'

And with this her ladyship had to be content. Had she seen her husband taking exercise in the same yard with quite ordinary prisoners she might have felt less satisfied than she was.

Meanwhile the pieces of the puzzle in the deft hand of fate were being put rapidly together. The mystery seemed as inexplicable as ever; but every moment was bringing it to completion.

Morton was still puzzled, however. He had a clew that more than ever convinced him that the prisoner under remand in Holloway was concerned in the robbery of the supposed 'Santa Anna.' He hoped to make much out of proving that the notes found on the culprit had been unlawfully obtained; but things were unsettled in Bechuanaland at present, and the matter was more difficult than it seemed at first blush.

Moreover, the magistrate at Bow Street had hinted to Inspector Morton that, unless something more tangible was offered at the next hearing, he should have no alternative but to release the prisoner. Morton smiled in a superior manner, but he was at his wits' end all the same.

With a vague idea that he might make use of the man, he dropped in upon Shorter, and incidentally mentioned his trouble.

'I'm cock-sure I have the right man,' he said. 'Well, you may,' Shorter responded. He had no intention of disclosing the fact that the burglary was a bogus affair altogether. 'And one thing proves your deduction. The man who wrote the letters found on your prisoner is Moss.'

'You feel quite sure of this?'

'I am going to prove it to you. Here is a scrap of paper written by Moss, which I got from him by a little stratagem. Compare it with your capture.'

Morton did so, and professed himself satisfied. Shorter shook his head knowingly. As a matter of fact, he was as much in the dark as Morton, only the latter was entirely on the wrong track, and Shorter wasn't,

Nevertheless, he could not even yet see the connection between Moss and the swindle perpetrated upon Hunt & Roscoe. These letters, Morton very naturally supposed, related to the burglary. That he was called in to investigate the burglary as a mere blind, Morton did not dream. And Shorter was much nearer the mark in connecting the letters with the swindle proper.

'I'll tell you what,' he said after a long pause. 'I've got a permit to see Lord Maplehurst in Holloway to-day at three. I want you to arrange for me to see him in the exercise-yard. If the other prisoners are paraded at the same time, I

may be able to identify your man. Remember, I have encountered a few criminals in my time.'

Morton nodded his head gloomily.

'Oh, I'll arrange it if you like,' he said. 'Not that I anticipate anything of real importance. Still, you might know the fellow. I'll see the thing is arranged before this afternoon.'

With this promise Morton departed, and when Shorter arrived at grim Holloway, later in the day, he found Lord Maplehurst gravely pacing a gloomy yard at a respectful distance from a group of men tastefully dressed in the artistic livery

thoughtfully provided by the state.

Maplehurst was looking somewhat pale. Evidently the confinement was telling upon his health and spirits. He welcomed Shorter with a warmth which would have been lacking under more lively conditions. Contrary to rules and regulations governing such cases, his lordship was smoking a cigarette.

'I managed to screw this concession out of the doctor,' he said; 'but it's most awfully slow here, Shorter. Look at those poor beggars tramping round yonder. I wanted to get up a game of leap-frog with them, but the warders wouldn't have it. And the fools here call that kind of

thing exercise.'

As his lordship spoke, a big door clanged open, and a lot of other men entered the paved quadrangle. In their case the livery was conspicuous by its absence. Being prisoners under remand, vigilance in their case was not so great.

A warder with long chain and clanking keys

came up to Shorter.

*The fellow in the gray overcoat and brown

hat is Morton's man,' he whispered.

Shorter nodded, and the warder passed on. As the prisoners under remand came round in drooping couples, Shorter kept a keen eye upon his man. When the latter passed he gave a violent start and turned away.

Shorter marvelled, but said nothing. That he had never seen the fellow before he felt certain, that he himself had not been recognised he was equally positive. In that case Lord Maplehurst

must be the cause of the agitation.

Shorter waited further developments. He was pleased to notice that the delinquent fought shy of his side of the yard. Then he and Maplehurst crossed the intervening space and literally forced the man into a corner.

'Look at that chap yonder,' he whispered eagerly; 'he's avoiding your lordship, and I should very much like to know why. Do you

recognise him?'

"I don't think so,' Maplehurst replied. 'Anyway, you're quite right. He certainly is fighting shy of us. I'll soon see.'

Without further ceremony, Maplehurst strode up to the shifty prisoner, and taking him by the shoulders, turned him round. He gave a cry of astonishment. Shorter hurried to the spot. 'I was right, your lordship,' he exclaimed.

'Rather. It's a funny thing, by George! and a good one for your clients that they happened to send you here. This is my late secretary, Pearson.'

The detected rascal gave a groan and grew calm again. There was nothing to be gained by a further display of assumed innocence.

Shorter struggled with a tendency to throw up his hat and dance a pas sent upon the flagged pavement. Never since he had been in business had such a streak of luck as this come his way. He saw his way now to recover the whole of the money lost by his clients, who, out of common gratitude—

'What are you doing here?' Maplehurst demanded.

'Haven't a notion,' Pearson said coolly.
'Burglary they call it. And I'm as innocent
of it as your lordship is himself. That I'll
swenr.'

'Never committed a burglary in his life,' Shorter said cheerfully. 'But look here, my good sir, there are other things besides. Pictures, for instance. You might just as well make a clean breast of it. I can lay my hand on Moss at any moment; and he's certain to squeak. Now, whereabouts in Southampton can I find that "Santa Anna"?'

Pearson's face was a study. A peculiar green hue, a kind of sickly varnish, glistened upon his smooth features.

'I don't know what you are talking about,' he muttered.

'Oh yes, you do,' Shorter went on in the same sanguine strain. 'But for his lordship being detained here under an order for contempt of court you might have got clear away altogether. Unfortunately certain letters were found upon you which led to the belief that you had been guilty of burglary; and so they remanded you here. I happen to know that you didn't commit that burglary.'

'I swear I didn't,' Pearson cried eagerly.

'I know—I know. But you can't deny that you took advantage of your master's enforced absence from England to personate him; you can't deny that you and Moss hit upon the happy idea of getting Manders.'

'Manders,' Pearson gurgled.

'Yes, Manders. And Moss, and Lemaire alias Frederic, and a secret way of getting into Messrs Hunt & Roscoe's premises. Never heard of such a thing as the wax impression of a safe-key perhaps. It was a pretty idea, but you overdid it. Most men would have been satisfied with the cash for the original picture; but you wanted two big lots of cash and the original plunder to boot. And the thing turned out trumps apparently. Had Lord Maplehurst not trusted you so implicitly this thing never could have happened.'

'You're right there,' Pearson muttered.

'And a nice mess you've got me into,' Maplehurst remarked. 'Only I shall be away from here before you, after all.'

Pearson very wisely confined himself to silence. 'Unfortunately for you,' Shorter resumed, 'the law was allowed to slacken. On the strength of the success of your venture you allowed yourself to indulge in the flowing bowl to such an extent that you found yourself in Southampton station instead of in the dock there.'

'The dock will come in due course,' Maplehurst suggested.

'Very neat, your lordship, very neat,' Shorter murmured. 'Well, after that, you probably got into the train in a muddled condition and consequently found your way to London. Upon what happened subsequently I will not enlarge. What I am anxious to discover now is what has become of the picture and where are the notes for which you changed the cheque received from Messrs Forrest.

By this time Pearson had practically recovered his equanimity. He knew that he could gain nothing either by a defiant or an apologetic attitude.

'Well,' he said coolly, 'as you seem to be so confoundedly clever, you had better find out for yourself. Pity to spoil the riddle by telling it.'

With which Pearson turned upon his heel after politely saluting his late employer.

'A wonderfully neat swindle,' said the latter.

'Well, yes, my lord,' Shorter remarked. 'You see we can afford to admire the neatness of it, seeing that the entertainment is not likely to be costly. Barring a few pounds, we shall recover all the money and the picture to boot.'

'It's been costly enough for me,' Maplehurst said grimly.

Indeed his lordship seemed likely to be the only sufferer. But Shorter's mind was too full of other things to concern much about Maplehurst. As speedily as possible he hunted out Baron Brantano and informed him what had happened.

Of course I can help you further, said the latter. 'I certainly paid Pearson for the "Santa Anna" in Bank of Bechuanaland notes, as his spurious lordship objected to a cheque, seeing that he was about to travel. I can give you the numbers of these notes if you like.'

Baron Brantano did more than this. He not only produced a list of the numbers of the notes, but he was in a position to inform Shorter the name of the hotel where Pearson had stayed.

Armed with this information, Shorter journeyed down to Southampton. With very little trouble he found out all about 'Lord Maplehurst.' The latter had been staying at 'The Old Yacht' hotel, and had announced, prior to his departure, that he intended sailing by a certain boat for Jersey.

By so doing no doubt he intended to reach the coast of France by a less conventional route. On the day fixed for his departure he had lunched somewhat freely, and afterwards departed for the station with a friend who was going somewhere by train, thus proving the correctness of Shorter's theory. Before his 'lordship' quitted the hotel he left instructions as to the disposal of his luggage; but as he did not return, and his bill remained unpaid, the same was detained.

'Eccentric, very eccentric,' Shorter said with a Solon-like expression. 'Just what my foolish friend told me. However, I've come to pay the account, and as I'm returning to London, where his lordship now is, I'll take his traps with me.'

It was a bold stroke, and one which, moreover, cost Shorter sixteen pounds in hard cash; but as a packing-case and a Gladstone-bag were produced he felt pretty assured that he was getting good value for his money. And so it transpired; for, when London was reached, Shorter drove straight to Piccadilly, and there, in the presence of Hunt & Roscoe, forced open both parcels.

'Heaven be praised,' Hunt gasped fervently.

'I feel like a new man,' Roscoe said in the same tone.

For there before them, in all its beauty, stood the 'Santa Anna.' There was more to come also, for in the Gladstone-bag, crushed between silk mufflers, was a bundle of Bank of England notes to the value of £19,560, and somewhere about the same in Bechuanalands. Taking it altogether, Hunt & Roscoe looked like getting their own back, like saving their reputation both for probity and artistic acumen, and all for less than £500.

'I tell you what we'll do,' Shorter observed when at length the partners were sufficiently sane to discuss business. 'So long as the Baron gets his money back he has promised me that he will say nothing. And if there is a trial, at which it comes out that a telegram, apparently intended for some one else was used by you to—er—that is, in the way of business, people may talk. We'll get Lord Maplehurst to prosecute Pearson merely for stealing a picture, you understand, and we might safely add the charge of forgery too. Morton doesn't know about anything besides the burglary; at least not much.'

Needless to say, Messrs Hunt & Roscoe were only too willing to agree to this course. And in the fullness of time Pearson was put upon his trial and sentenced to ten years for larreny and five for forgery, having pleaded guilty to the charges; so that the name and nature of the painting formed no feature at the trial.

Another fortunate thing transpired for the partners. How it was done and how it came about will always remain a mystery; but the fact remains that Pearson found some way to communicate with Mr Moss; for when the police paid the latter rascal a visit he was nowhere to

be found. He had managed to get clear away and still continues to elude the vigilance of the authorities.

Lord Maplehurst came up to give evidence at the trial of Pearson on the same day that an order was made for his discharge, so that when he left the witness-box he stepped out of it a free man. He was quite prepared, he said, to waive his claim to the 'Santa Anna,' but Lady Maplehurst declared that now she would not part with it

under any circumstances, and Baron Brantano gracefully yielded.

A present of £1000 from Hunt & Roscoe to Shorter amply compensated him for all his trouble in the matter.

'You need not thank us,' said Roscoe. 'You have saved us a great deal more than that;' which was true, considering how perilously near the firm had been to becoming bankrupt in both estate and reputation.

AUSTRALIAN SNAKES AND SNAKE-YARNS.



OME time ago I read in an English journal what purported to be an account, from personal knowledge, of Australian or rather Victorian snakes. It was a tissue of errors, the most notable of which was the

assertion that the carpet-snake was one of the most venomous. Almost every one knows that the carpet-snake is one of the pythons, and therefore non-venomous.

The snake is pre-eminent in this respect, that it is the only Victorian animal which is really dangerous to man.

One may hear at times wonderful tales of oldmen kangaroos trying to drown men in waterholes, or of dingoes going in mobs and endangering the lives of belated travellers; but these are tales which, in most instances, are intended to interest or terrify new-comers, or, as we call them, 'new chums.'

It is, however, an undoubted fact that the presence of venomous snakes is a real danger to life; and therefore it is that every man's hand is against them, although they, as a rule, do not show fight unless they are attacked or at any rate prevented from reaching their holes.

In and around the snake, also, there lingers a weird fascination, caused in part by religious history and partly by the beaute du diable which it possesses.

Many people will scoff at the idea of a snake's possessing any beauty, du diable or of any other kind; but they are blinded by the repulsive feeling which the sight of the reptile evokes.

Just as in England, around the fireside on winter nights, the conversation turns on ghosts, so in Australia, particularly in the bush, and doubly so when there are visitors from other lands, the talk centres a good deal on the snake. The visitor will be wise if he takes what he hears with a grain of salt. It is the nature of man to exaggerate, and snake-yarns and fish-yarns are notorious in Victoria as possessing less truth to the acre than any others.

In travelling about one hears strange accounts of various snakes which are not known to the

field-naturalist—namely, of the hoop-snake, which, when it wants to go downhill, takes its tail in its mouth and rolls down; of the whip-snake, which is so like a whip-lash that men have taken them and tried to fasten them to whip-handles; but, most of all, in many districts there is a collection of tales about 'the big snake' which has been seen by one and another at various times. Just as the sea-serpent is still occasionally seen by imaginative persons, so some of the Victorian ranges are haunted by snakes far surpassing in size any Victorian snake that has ever been measured by scientists.

Some years ago, while staying at Dean's Marsh, a little hamlet in the Otway Ranges, I had a good chance of hearing part of the snake-lore of the place: how one man had seen a huge snake at least fifteen feet in length lying basking by the road-side, and was afraid to tackle it, but on going a little farther had met a man on horseback with a twenty feet stock-whip, and he also on seeing the monster feared to disturb it; how another had seen it sleeping under a cliff, and creeping up to the top had dropped a rock on it, and then run away without waiting to see the effect.

The fact is, that no Victorian snake exceeds seven feet, if I except the carpet-snake, which is found only in the extreme north of the colony.

This, as I mentioned above, is non-venomous, and kills its prey by squeezing it to death.

There are five kinds of venomous snakes in Victoria: the tiger-snake, the black snake, the brown snake, the copperhead, and the death-adder.

The last mentioned is very rare in Victoria, and very venomous. It is about two feet long, very thick in proportion to its length, of a dull-brown colour, and with a flat, wide head. The strangest thing about it is that many people believe its sting is contained in the tail.

Leaving the death-adder out of the count, there are four species which are fairly common. The tiger-snake comes first, in popular estimation, if not in reality. It is regarded as the most venomous and the most savage. It attains in some districts a length of about six feet, but the

majority of specimens are from three to four feet long. Its colouring is variegated, black and brown on the back and pale-brown on the belly. When attacked it sometimes raises its head to the height of about a foot from the ground; and its appearance then, as it rests on its coils with its head seemingly widened out, its neck contracted, its forked tongue flickering out of its mouth, and its eyes blazing with rage, makes the average man rather chary of approaching. One good point is that the backbone of all snakes is easily broken by a blow from a stick, and the power of locomotion is thus taken away. Next on the list is the black snake. This is rather larger than the tiger, and the handsomest of all Victorian snakes. The back is jet-black, and shines like a wellpolished boot, and the belly is a beautiful salmonpink. It is less common than the tiger-snake, and is very frequently confounded with the copperhead. The brown snake is brown on the back, whitybrown on the belly, and about the same length as the other two. The commonest of all, at any rate near Melbourne, is the copperhead, which is found in most parts of Victoria. As its name implies, it has a coppery head, a dark back, and a yellowish belly. It is very hard in some cases to distinguish the various species, as they vary so much in size and colour in different places. For instance, in the Otway Ranges, near Lorne, which is now a fashionable watering - place, a snake four feet long is considered large, while in Gippsland it is a common thing to find them five or six feet in length.

Another circumstance which causes confusion is the fact that the male and female are not exactly alike.

Having now briefly described the chief kinds of snakes, I shall mention a few facts in connection with them which have come under my own notice or have been told me on reliable authority.

In travelling through the bush, nearly everybody carries a stick, and so is prepared if a snake is seen. One peculiarity of snakes is that they seem to vanish if the eye is once turned away from them. You may see a snake lying seemingly asleep, you look round for a moment, and when you look back the snake is gone. It is surprising how small a hole or covering serves as a retreat. They are rather partial to rabbit burrows, and rabbits and snakes seem to dwell together in amity, though I expect the snake never goes hungry while there are young rabbits about. Hollow logs are a favourite haunt, and in this way they are sometimes brought into the heart of Melbourne by wood-carters. Snakes are generally plentiful in swamps; snipe-shooters at times get more snakes than snipe, and dogs are sometimes bitten. The 'record' bag was five snipe and fifteen snakes; and, though I cannot vouch for its truth, it may be true, as I got the same average myself-namely, one snipe and three snakes.

Dogs often learn to kill snakes, but they are certain to be killed themselves sooner or later. Their modus operandi, when they find a snake, is to spring on it, seize it near the neck, give it a vigorous shake, let go, and jump back before the snake can strike; if the first shake does not disable, they seize and shake again till they kill it. I once saw two dogs kill a snake in this way very neatly; the moment one dog let go the other seized hold, and the snake had no chance at all.

Another snake-destroyer is the laughing-jackass or giant kingfisher, a bird as large as a small pigeon, and possessing a very powerful bill. This bird seizes the snake by the neck, flies up twenty feet or so into the air and then drops it; if the first fall is not enough it continues the operation till its prey is thoroughly disabled. I may mention that this bird is the champion humourist of the 'bush,' though I am sorry to say no Australian poet has yet risen to celebrate it as it deserves.

Eagles, hawks, and crows also destroy snakes; the iguana, a large lizard which attains a length of five or six feet, and has an armoured skin like the crocodile, is also regarded as a snake-killer; and tame and wild cats take part in the good work.

Summer is of course the time of activity for all the snakes, as they lie dormant or semi-dormant in winter. They begin to come out from their holes in September, and are found from then till May. Their food consists of lizards, mice, frogs, and other small deer, and they are popularly credited with possessing a fondness for milk. They are all fond of the water, and are strong swimmers.

As a proof of this, I may mention that, on one occasion, when yachting in the Gippsland Lakes, we met a tiger-snake swimming from one point of land to another, and at least three miles from the nearest land. He was swimming strongly and well; but a charge of shot broke his back, and the last we saw of him was his body floating belly upwards. I have also seen snakes swimming across rivers, and have known them to be found at the bottom of wells.

There are few bush farmhouses which have not had their snake-history. One of the most remarkable tales, and one which I know to be true, was told me at Hedi, a little place on the King River, about one hundred and twenty miles from Melbourne as the crow flies. The eight-year-old son of one of the settlers was accustomed to sleep with the other children in a small room a little distance from the house. All at once the little fellow began to tell his sisters and then his father and mother that a snake used to come into his bed. When sent to bed at night he used to cry, and say he was afraid of the snake. His parents, not believing the story, and thinking it was an invention, threatened to

whip him if he said anything more about it, and this silenced him. However, a few mornings after, the little fellow overslept himself, and when one of his sisters went to call him, she, to her horror, saw a large black snake coiled on the pillow by the boy's head. She at once rushed out and gave the alarm, and an elder brother ran to the spot, armed with a pitchfork; he went in, deftly thrust the handle of the fork into the middle of the coil, yanked the snake on to the floor, and then despatched it with a couple of blows. The little fellow was none the worse in one way, but his nerves were so shaken that his parents had to send him to town for a time.

In another house, the lady on going down to her dairy one day found it tenanted by an unwelcome intruder in the shape of a snake. None of the menfolk were near the house, so she seized the broom, killed the snake, and then fainted. I expect most ladies would have fainted first; but in the bush familiarity breeds, not exactly contempt, but at any rate fearlessness.

On the other hand, I was once out wallaby-shooting with a man who insisted on poking his gun into every tussock of grass before he would put his foot down; and I heard of another who, when the cry of snake was raised, dropped his gun, made a bee-line for the nearest house, and refused to budge from it until they came for him with a buggy. When they returned to the hotel to spend the night, the practical joker of the party put an eel into the timid one's bed and nearly frightened him into a fit.

I was once walking along the Erskine River, at Lorne, in company with two friends, one of whom was rather afraid of snakes. We were stepping from rock to rock, whiling away the journey with talk, when suddenly my timid friend 'shied' across to the other side like a flash. 'What's up?' said I; and looking forward I saw, about three feet from me, a tiger-snake, partly coiled, but with head upraised about a foot and flattened out, just as it seemed in the act to strike; however, my stick was the quicker, and one well-directed blow broke his back. This explained my timid friend's 'shy;' and after chaffing him a bit, and smashing the snake's head with a stone, we went on our way.

We had not gone far when another snake was espied. It at once dived into the water, which was about three feet deep, and seemed to be trying to hide itself under a rock at the bottom of the pool. My friend, anxious to retrieve his reputation, shouted, 'Let me at him,' and rushed forward with lifted stick to the edge; but the edge was slippery, and next moment he and stick and snake were in the pool together. Surely never man was frightened more; one frantic leap, and he was yards away. We roared with laughter at his plight, and the joke was so good that we were almost tempted to let the innocent cause escape; but that could not be.

There are no professional snake-charmers in Australia; but we have professional snake-catchers, as the following anecdote will show. A friend, a chemist in Melbourne, was one day standing behind his counter when a sleepy-looking countryman strolled into the shop, and accosted him with the question, 'I say, boss, do you want to buy any snakes?' 'What!' said my friend; 'have you any?'

'Oh yes, boss,' said the man, plunging his hand into a bran-bag which he was carrying, and bringing out three or four. He was coming up to the counter with them, when my friend yelled to him to stand still, as he was quite

near enough.

'Oh! they won't bite, boss,' said the man, continuing to handle them as if they were kittens.

'You stand where you are, and put the brutes back in the bag, and then I'll talk to you,' shouted my friend.

The man obeyed, and my friend then asked him what he was doing with the snakes.

'Well, boss,' said he, 'I brought them from the country to sell to the Zoological Gardens in the Royal Park; but none are wanted there just now, and so I am trying to sell them elsewhere.'

'I'll give you a crown for the largest, if you will put him into a bottle for me,' said my friend.

'Done, boss,' said the fellow; and plunging his hand again into the bag, he drew out a tiger-snake about five feet long; and, again remarking 'he won't bite,' he proceeded to stuff it head first into the bottle.

It was so large that its head began to get perilously near the mouth of the bottle before its body and tail were all in; but the man poohpoohed the idea of danger, and continued to push away till his task was accomplished.

My friend at once filled the bottle with spirits, corked it tightly, and now exhibits it to admiring friends as a memento of 'what may happen to a man in Melbourne.' There is a sequel to the story which also presents some comical features.

Another chemist, who had a collection of curios, lived a few streets away, and my friend, thinking to do him a good turn, sent the man there.

A week or two afterwards they met, and chemist No. 2 started the conversation by asking angrily, 'What on earth did you mean by sending that infernal lunatic to my shop?'

'What lunatic?' said No. 1.

'Why, the fellow with the snakes. He marched into my shop, said you had sent him, and immediately hauled out a handful. I bolted out of the door, rushed to the nearest policeman, and had the fellow arrested; and I'll thank you to keep your lunatics to yourself in future.'

A good many adventures, some comic and some dangerous, happen to sportsmen when out shoot-

ing; and with one of them, which happened to myself, and is quite inexplicable by me, I will conclude.

Two of us were walking on opposite sides of the river Campaspe, near Woodend, a country-town about fifty miles from Melbourne. It was not far from the source of the river, and so the stream was only about twelve feet wide. The banks on either side rose to the height of about four feet. Suddenly my mate shouted out something to his dog, and at the same moment I saw a large copperhead glide quickly down the bank

into the water. Bang went the gun, and the shot, striking the water, raised a little cloud of spray. Out of this cloud soared about twelve inches of the business end of the snake—that is, his head and neck. It rose to the height of about ten feet, passed directly over my head, and fell on the grass about five yards away, alive and wriggling. The charge of shot had of course cut the snake clean in two, and the body had floated down the stream; but how the head and neck could rise to such a height, and be propelled to such a distance, was then, as it is still, a puzzle.

MY EXPERIENCES AS A COLLABORATOR.



HAD written three comedies, and spent a small fortune getting them typewritten (for managers are remarkable for two things, an anxiety to get plays and a capacity for losing them), before any one in

authority had given me the slightest encouragement. It was, therefore, with delight that I read and re-read the following letter: 'Dear Sir, —I have read your comedy with much interest, and shall be glad to see you at the — Theatre at twelve o'clock next Wednesday.' The signature which followed was that of a well-known London manager.

I need hardly say I was there at the appointed time; indeed I was in the Strand a good hour before it, wondering if the passers-by took me for a celebrity. What dreams I indulged in during that hour's perambulation! What pleasant, idiotic dreams! They were dispelled quickly in the actor-manager's dressing-room. The play was hopelessly unactable, he said; and he rattled off its faults of construction with such amazing rapidity that I felt ready to sink through the floor.

'Then you don't want it,' I gasped finally.

'Certainly not,' he replied; 'but I have a proposal to make. Your dialogue is excellent; and as I have a good plot, and know all about stage requirements, I think we might write a play together.' Then he produced several pages of foolscap and read to me for twenty minutes. Not a ghost of a plot could I see; only a bewildering set of old stage incidents and situations having little or no connection with each other.

'Don't you think there's too much material here,' I protested mildly, 'for one play?'

'Certainly not, my dear fellow,' he answered.
'What the public want is fat and plenty of it; it will be your business, of course, to weld the material into a homogeneous whole.'

I thought of my own play lovingly, with its scenes fresh from life, and its characters drawn from my best friends—or enemies, as the case might be—and sighed.

However, I told him I would think it over, and left, feeling years older, a hack, a mere machine. My friends—confound them!—said I was very lucky, and should accept the great man's offer forthwith; and when I asked them hopelessly what could be done in this present year of grace with a repentant convict and a comic man who saves the heroine from the villain of the piece, they said grimly that that was my business. I made it my business, and a dreary, wretched business it was.

When the scenario was completed I took it with me to the manager's house, with little hope that he would be satisfied. But he was delighted. Perhaps he saw in it some faint resemblance to the child he had entrusted to me, and had parental feelings with regard to it. He spent a whole evening, anyway, making marginal corrections in pencil. I spent another proving to him the corrections were wrong.

Then came the dialogue, at which he confessed, modestly, he was no hand, so that I completed act by act, and he passed it with approval. It would be altered and cut, he said, at rehearsal, but he wouldn't bother about it now. Then he made two stipulations: (1) that I should tell nobody what work in the play was mine and what his; and (2) that I shouldn't attend rehearsals till he asked me to.

'An author's only in the way, my boy,' he said; 'he gets nervous and puts all the company out.'

I agreed to both stipulations wearily. I was in two minds about the play: I wanted it to be a success and yet I didn't. I felt, if it succeeded, the public wouldn't care for my own plays; for it was the embodiment of everything stagy, everything I detested in plot and treatment. Yet success would mean money, which I wanted badly, and managers would thereafter read my work at any rate.

Rehearsals had been going on for a week when my presence was requested at the theatre. I was shown into the stalls, which were very dark and draughty, and told to listen. I had my type-written copy of the play, and tried to follow the acting in the dim light. It was a difficult matter, for even at this stage the dialogue had been altered a great deal. Unlooked-for retentions occurred, however, in the shape of typewriter's blunders, which had not been corrected in the manager's copy, and which made absolute nonsense of many of the sentences. I mentioned this to my collaborator, and he was quite annoyed; not at the fact, but with me.

'It's of no consequence,' he said; 'and it's too late to alter anything now.'

I wish it had been.

After this rehearsal I felt certain that the play was doomed. At times I tried to think differently, especially when it was praised, as it generally was, by the actors and actresses; and then I would remember the well-known adage, 'When actors praise a play during rehearsal, look out for a dead failure,' and would return to my original mind. It is in the nature of things that actors should be bad prophets. Their art is the art of imitation, and they are, as a class, imitative in character. They like parts and situations which have succeeded before, and forget that what the public want is life, not stage life.

In spite of the manager's dictum, alterations went on apace, and everybody lent a hand.

'That'll fetch 'em,' said the low-comedy man one day to me, as he reeled off some lines he had interpolated from an old play by Boucicault.

'I think I have improved my love-scene, don't you?' said the pretty leading lady, as she read me a passage from Sweet Lavender which she thought fitted in so nicely. 'It was so effective at Terry's, don't you know?'

so effective at Terry's, don't you know?'
'I hope you won't mind,' exclaimed a modest young man, who acted in a small part as the mayor of a provincial town, 'but I've put in one or two wheezes from my old part in The Private Secretary. Will take 'em out if you object; but they got me a lot of hands in the provinces.'

My friends congratulated me on all sides, and wondered why I looked so gloomy; and female relations went so far as to choose a future home for me in Eaton Square, and began to think of furniture.

At last the fateful night arrived, and I found myself in the pit, after an altereation with the man at the door, who wouldn't admit me. The first two acts seemed to go well—fairly well, at any rate; and I went up to the stall bar, among the critics, in order to move about and be seen. Nobody knew me, however, and perhaps it was just as well. The critics were hostile to a man. I slunk back into the pit and waited there during the final act. At the last rehearsal the actor-manager, in spite of my protests, had

altered the original unhappy ending. 'They won't stand it, my boy. They must go away happy, you know,' he had said, and the company echoed the sentiment. Consequently none of them knew their parts, and stumbled through them anyhow. At first the audience was tolerant; but I didn't like it when the man next to me began to eat an orange; then another followed suit; and there was some tittering, followed by a remark from the gallery which set it in a roar. It was all up, I could see; but I went behind, determined to face the music; and, after 'making up' in the orthodox manner, was discovered by a jeering crowd hand-in-hand with my collaborator. He had insisted on taking my hand, with the view, I suppose, of encouraging me. We looked, said a lady friend afterwards, like two linked cherubs about to be immolated.

The next morning I had six papers brought to me by a considerate brother before I was out of bed, all containing long hostile criticisms; also, a letter from the manager, begging me to come to the theatre at once. 'Further alterations,' he wrote, 'would have to be made, or the play was done for.' Further alterations! I smiled grimly and went off without breakfasting. When I reached the theatre all the principal actors were present, and all talking at once. A number of them had been up most of the night 'writing up' each other's parts. Not their own parts now! They had done that before, and were quite satisfied with them, but each other's! For all thought the faults of the play lay outside their own spheres of influence. Asked casually for my views, I suggested harking back to the original manuscript; but as this proposition was hailed with derision, I washed my hands of the affair. In a week the run came to an end, and the theatre was closed. I still send out my three original comedies occasionally, and they sometimes come back to me after many days. But I have not yet written a fourth. Perhaps I shall some day. Who knows?

MAY-BLOSSOM.

Soft blossom-snow, so white and sweet,
That drifts about my aimless feet,
As far afield I stray,
You call to mind those bygone hours
When all the paths were bright with flowers,
And life was sweet as May.

The earth's a mist of growing things,

The sunny air a world of wings

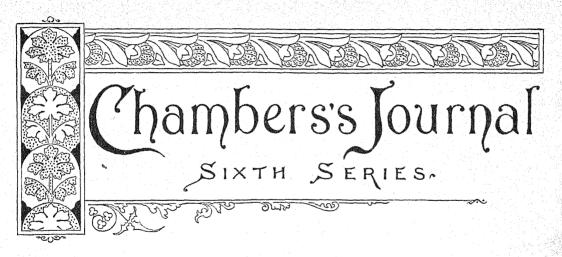
Which cleave the lustrous blue;

I reach and break a fragrant spray,

And then go singing all the way,

For summer comes with you!

E. MATHESON.



A CHAPTER ON CONVERSATION.



all the arts, the art of talking is that in which the greatest number practise and in which the smallest number are proficient. The Scotsman can argue, the Irishman can joke, the Londoner can gossip, the

English peasant can enjoy empty meditation; but few can talk, and still fewer can converse. We might find a partial explanation of this, no doubt, in the fact that very few people try to talk their best; hence we might address our readers like the preacher in the park, and say: 'You have every one of you a pussonal and hindividual responsibility in this tremenjous matter; and you're a-shirkin' on it; but we fear the expostulation would be futile. The fact is, people are so busy that they have no time to cultivate good talk, and conversation has fallen out of fashion like Watteau bodices and Louis Quatorze high heels and buckles. Ah! those good old times—we shall never see the like again—Sydney refinement, Bayard courtesy, Grandison politeness -chivalrous manner with good talk. The times are out of joint for such things now.

We have no intention of furnishing our readers with any rules or canons of good conversation with a view to its revival, like Baron le Knigge, for example, who, in two portly volumes on the subject, devotes some twenty pages to 'rules for lovers and those that converse with them.' Fancy making love by rule! That is worse than the college don who always went into society with a multum in parvo book of wit in his pocket, and kept peeping at it under the table to refresh his memory. This was regarded as by far the best joke about him, and the laughter before he spoke was always greater than after. Such attempts must defeat the end in view, for the moment any one is felt to be talking by rule all the charm of his conversation vanishes. No doubt conversation has always excelled in artificial ages; but this is only one of the paradoxes of truth-and truth is always paradoxical. 'Conversation,' says Mr Payn, 'is a gift of

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nature, and where artificial is never really good.' Our object, therefore, in this paper is not to supply rules for talkers, but simply to write a chatty chapter on conversation which will interest our readers and help to while away an idle hour.

One reason why conversation so often falls flat is because people will consider it their duty to say something though they have nothing to say. Perhaps, like Montesquieu, they lose their ideas before they can find words for them; more frequently we fear they simply force the conversation. These people form a fraternity of boredom. Instead of threadbare coats they carry about threadbare ideas, and hunt to the death every 'stale, flat, and unprofitable' subject within the domain of human knowledge. Now, the Israelites in Egypt found it very difficult to make bricks without straw, and good conversation will never flourish among those who have no material with which to make it. As for bores, never knowingly begin with them. You will find them more difficult to get rid of than your own shadow.

The mistake of those who do talk is that they are seldom content with that 'leisurely speech' of Bacon's, that restful talk in which the mind is not fatigued or the temper tried, that talk which Stevenson beautifully calls 'a higher power of silence, the quiet of evening shared by ruminating friends.' They seem to emulate Disraeli discussing Beckford of Fonthill, who talked 'like a racehorse approaching the winning-post! Talk of this kind can never leave the most pleasing impression. It is vitiated by that self-assertiveness and want of sympathy which the social instinct resents, and encourages that monopolisation of the talk which Lamb once playfully reproved in 'Did you ever hear me preach?' Coleridge. asked the poet. 'I have never heard you do anything else,' replied Lamb. Dr Johnson disliked self-assertiveness in others however leniently he may have judged himself. Speaking of Goldsmith, he said: 'He was not an agreeable APRIL 30, 1898. [All Rights Reserved.]

companion, for he talked always for fame. A man who does so can never be pleasing. Probably, had they met, he would have said the same of Richardson, who talked little except about his own works. Swift (who hated rivals) had a very caustic way of dealing with ambitious talkers. Happening to be in company with a petulant young man who prided himself on saying pert things, and who cried out: 'You must know, Mr Dean, that I set up for a wit!' 'Do you so?' said the Dean; 'take my advice and sit down again.' The absence of jarring elements like these explains why groups of the same class talk better than mixed companies. The talk of authors, for example-probably the best talkers in the world -is much better among themselves than with the outside world. One of the Tatlers says the same thing in other words: 'This particular pleasure, which gives the only true relish to all conversation, a sense that every one of us liked each other.'

Argumentative talk cannot be recommended, because it is seldom convincing, and generally ends in the defeat of both parties. No doubt it was a grand intellectual treat to watch such tournaments as took place between Johnson and Burke, Berkeley and Dr Samuel Clarke, Voltaire and Dr Young, or Lord Macaulay and Charles Austin; but even such great men as these could not avoid an occasional unhappy exchange of amenities—as, for example, when Dr Johnson called Adam Smith a liar, and Adam Smith in return denied the humanity of Johnson's mother. Another instance of the same kind took place in the famous discussion between Voltaire and the poet Young on the merits of Paradise Lost. Voltaire objected to Milton's method of giving to abstractions like Sin and Death offices proper only to living beings. The parallel between the hungry monster of Milton's, 'grinning horrible its ghastly smile,' and the meagre form of the speaker-his thin face lighted up, as it always was in conversation, with a peculiar sardonic smile—prompted Young to close the argument with the epigram:

You are so witty, profligate, and thin, At once we think thee Death and Sin.

One of the chief difficulties to good conversation is to know how to open with strangers. There is nothing better for such occasions than Hazlitt's advice: 'If you really want to know whether another person can talk well, begin by saying a good thing yourself, and you will have a right to look for a rejoinder.'

For wit is like a rest Held up at tennis, which men do the best With the best players.

People often complain that the company is so dull they cannot talk; but if we find the company dull we should blame ourselves. The thing is to touch the right vein in people. If we do that,

nearly everybody can talk well enough to relieve the monotony of a railway journey or a short seavoyage. It is foolish to seek a reputation for wisdom in a rigid taciturnity. Coleridge's story of the silent man with a large forelead, who seemed the very incarnation of wisdom till he burst into a rapturous cry at the sight of apple-dumplings, has made us rather chary about mistaking silence for genius. Of course there are cases of reserve with which we cannot help sympathising. Miles Peter Andrews was one such case. Being asked why le looked serious when everybody was laughing loud at a jest perpetrated by the most convivial of the company, answered, 'My dear sir, I can see no fun in a man who owes me five guineas.'

The man who imagines that the art of conversation consists in asking questions spoils conversation as much as the man who never asks any. People of this description will interrupt a speaker as frequently as they do in the French Chamber, and run anxiously from subject to subject with their interrogatories, like a cackling hen that is going to lay an egg. Horace Walpole, when exiled at Houghton, bemoans the existence of such a pest in the person of an aunt. Writing to his friend Sir Horace Mann, he says: 'I have an aunt here, a family piece of goods, an old remnant of inquisitive hospitality and economy. She were me so down by day and night with interrogations that I dreamt all night she was at my ear with who's, why's, when's, and what's, till at last in my very sleep I cried out, "For heaven's sake, madam, ask me no more questions."' Dr Johnson's dislike of being questioned is well known, and he gives the classic refutation of the habit in his own inimitable style: 'Sir, questioning is not the mode of conversation among gentlemen. It is assuming a superiority, and it is particularly wrong to question a man concerning himself.'

A careful study and comparison of the conversation of the great talkers would go so far to show how the charm of conversation depends on other gifts than the purely intellectual. Orrery, for example, tells us that Pope's voice in common intercourse was so naturally musical 'that I remember honest Tom Southerne used always to call him "the little nightingale."' Much the same might be said of Robert Hall, who used language 'like an emperor,' or of Coleridge, who used words 'like a necromancer;' but we have no space to go into the subject here. Lest our remarks should seem to have a merely negative bearing, we will close with a few hints on the subject from an acknowledged master. Many men of geniuslike Sir William Temple, Dean Swift, Bacon, De Quincey, and others-have written entertaining and profitable essays on the art of conversation; but no one has stated the qualifications necessary to excel in it with greater clearness and force than that prince of talkers-Samuel Johnson:

'There must, in the first place, be knowledge—there must be materials; in the second place,

there must be a command of words; in the third place, there must be imagination to place things in such views as they are not commonly seen in; and in the fourth place, there must be presence of mind and a resolution that is not to be overcome by failures. This last is an essential requisite; for want of it many people do not excel in conversation.'

JOHN BURNET OF BARNS.

CHAPTER XXVII.-OF THE MAN WITH THE ONE EYE AND THE ENCOUNTER IN THE GREEN CLEUCH,



PROMISE you I slept little that night, and it was with a heavy heart that I rose betimes and dressed in the chill of the morning. There was no one awake, and I left the house unobserved, whistling softly

to keep up my spirits.

Just without, something came behind me and cried my name. I turned round sharply, and there was my servant Nicol, slinking after me for all the world like a collie-dog which its master has left at home.

'What do you want with me?' I cried.

'Naething,' he groaned sadly. 'I just wantit to see ye afore ye gaed. I am awfu' feared, sir, for you gaun awa' yoursel'. If it werena for Mistress Marjory, it wad be a deal mair than your word wad keep me frae your side. But I cam' to see if there was nae way o' gettin' word o' ye. My leddy will soon turn dowie gin she gets nae sough o' your whereabouts. Ye'd better tell me where I can get some kind o' a letter.'

'Well minded!' I cried. 'You know the cairn on the backside of Caerdon just above the rising of Kilbucho Burn. This day three weeks I will leave a letter for your mistress beneath the stones, which you must fetch and give her. And, if I am safe and well, every three weeks it will be the same. Good-day to you, Nicol, and see you look well to the charge I have committed to you.'

Guid-day to you, sir,' he says, and I protest that the honest fellow had tears in his eyes; and when I had gone on maybe half-a-mile, and looked back, he was still standing like a stone in the same spot.

At first I was somewhat depressed in my mind, for it is a hard thing thus to part from one's mistress when the air is thick with perils to both. And it was not till I had crossed the wide stream of the Douglas Water and begun to ascend the hills that I wholly recovered my composure. The world was before me, that wide undiscovered world which had always attracted the more heroic spirits. What hardship was there to live a free life among the hills, under the sunshine and the wind, the clouds and the blue sky?

Now I dared not go back to Tweeddale by the way by which I had come, for the Clyde valley above Abington would be a hunting-ground of dragoons for many days. There was nothing for

it but to make for the lower waters, ford the river about Coulter, and then come to Tweeddale in the lower parts, and thence make my way to the Water of Cor. Even this course was not without its dangers. For the lower glen of Tweed was around Dawyck and Barns, and this was the very part of all the land the most perilous to me at the moment. To add to this, I was well at home among the wilder hills; but it was little I knew of Clydesdale below Abington, till you come to the town of Lanark. This may at first seem a trifling misfortune; but in my present case it was a very great one. For unless a man knows every house and the character of its inmates. he is like to be in an ill way if close watched and threatened. However, I dreaded this the less, and looked for my troubles mainly after I had once entered my own lands in Tweeddale.

At the time when the sun rose I was on a long hill called Craigeraw, which hangs at the edge of the narrow crack in the hills through which goes the bridle-road from Lanark to Moffat. I thought it scarce worth my while to be wandering aimlessly among mosses and craigs when something very like a road lay beneath me; so I made haste to get down and ease my limbs with the level way. It was but a narrow strip of grass, running across the darker heath, and coiling in front like a green ribbon through nick or scaur, or along the broad brae-face.

In less than an hour I had turned a corner of hill, and there before me lay the noble strath of Clyde. I am Tweedside born, and will own no allegiance save to my own fair river, but I will grant that next to it there is none fairer than the upper Clyde. Were it not that in its lower course it flows through that weariful west-country among the dull whigamores and Glasgow traders, it would be near as dear to me as my own well-loved Tweed.

I crossed it without any mishap, wading easily through at one of the shallows. There was no one in sight, no smoke from any dwelling: all was as still as if it were a valley of the dead. Only from the upper air the larks were singing, and the melancholy peewits cried ever over the lower moorlands. From this place my course was clear; I went up the prattling Wandel Burn, from where it entered the river, and soon I was once more lost in the windings of the dark hills. There is a narrow bridle-path which follows the

burn, leading from Broughton in Tweeddale to Abington, so the way was easier walking.

And now I come to the relation of one of the strangest adventures of this time, which as often as I think upon it fills me with delight; for it was a ray of amusement in the perils and hardships of my wanderings.

A mile or more up this stream, just before the path begins to leave the waterside and strike towards the highlands, there is a little green cleuch, very fair and mossy, where the hills on either side come close and the glen narrows down to half a hundred yards. When I came to this place I halted for maybe a minute to drink at a pool in the rocks, for I was weary with my long wanderings.

A noise in front made me lift my head suddenly and stare before me. And there, riding down the path to meet me, was a man. His horse seemed to have come far, for it hung its head as if from weariness, and stumbled often. He himself seemed to be looking all around him and humming some blithe tune. He was not yet aware of my presence, for he rode negligently, like one who fancies himself alone. As he came nearer I marked him more clearly. He was a man of much my own height, with a shaven chin and a moustachio on his upper lip. He carried no weapons save one long basket-handled sword at his belt. His face appeared to be a network of scars; but the most noteworthy thing was that he had but one eye, which glowed bright from beneath bushy brows. Here, said I to myself, is a man of many battles.

In a moment he caught my eye, and halted abruptly not six paces away. He looked at me quietly for some seconds, while his horse, which was a spavined, broken-winded animal at best, began to crop the grass. But if his mount was poor, his dress was of the richest and costliest, and much gold seemed to glisten from his person.

'Good-day, sir,' said he very courteously. 'A fellow traveller, I perceive.' By this time I had lost all doubt, for I saw that the man was no dragoon, but of gentle birth by his bearing. So I answered him readily:

'I little expected to meet any man in this deserted spot, least of all a mounted traveller. How did you come over these hills, which if I mind right are of the roughest?'

'Ah,' he said, 'my horse and I have done queer things before this,' and he fell to humming a fragment of a French song, while his eyes wandered eagerly to my side.

Suddenly he asked abruptly: 'Sir, do you know aught of sword-play?'

I answered in the same fashion that I was skilled in the rudiments.

He sprang from his horse in a trice and was coming towards me.

'Thank God,' he cried earnestly, 'thank God. Here have I been thirsting for days to feel a blade in my hands, and devil a gentleman have I met. I thank you a thousand times, sir, for your kindness. I beseech you to draw.'

'But,' I stammered, 'I have no quarrel with you.'

He looked very grieved. 'True, if you put it in that way. But that is nought between gentlemen, who love ever to be testing each other's prowess. You will not deny me?'

'Nay,' I said, 'I will not,' for I began to see his meaning, and I stripped to my shirt, and, taking up my sword, confronted him.

So there in that quiet cleuch we set to with might and main, with vast rivalry but with no malice. We were far too skilled to butcher one another like common rufflers. Blow was given and met, point was taken and parried, all with much loving-kindness. But I had not been two minutes at the work when I found I was in the hands of a master. The great conceit of my play which I have always had ebbed away little by little. The man before me was fencing easily with no display, but every cut came near to breaking my guard, and every thrust to overcoming my defence. His incomprehensible right eye twinkled merrily, and discomposed my mind, and gave me no chance of reading his intentions. It is needless to say more. The contest lasted scarce eight minutes. Then I made a head-cut which he guarded skilfully, and when on the return my blade hung more loose in my hand he smote so surely and well that, being struck near the hilt, it flew from my hand and fell in the burn.

He flung down his weapon and shook me warmly by the hand.

'Ah, now I feel better,' said he. 'I need something of this sort every little while to put me in a good humour with the world. And, sir, let me compliment you on your appearance. Most admirable, most creditable! But oh! am I not a master in the craft?'

So with friendly adieus we parted. We had never asked each other's name and knew nought of each other's condition, but that single goodnatured contest had made us friends; and if ever I see that one-eyed man again in life I shall embrace him like a brother. For myself at that moment I felt on terms of good-comradeship with all, and pursued my way in a settled cheerful-

CHAPTER XXVIII.—HOW A MILLER STROVE WITH HIS OWN MILL-WHEEL.



LAY that night on the bare moors with no company save the birds, and no covering save a dry bush of heather.

The stars twinkled a myriad miles away, and the night airs blew soft, and I woke in the morning as fresh as if I had lain beneath the finest coverlet on the best of linen. Near me was a great pool in a burn, and there I bathed,

splashing to my heart's content in the cold water. Then I ate my breakfast, which was no better than the remnants of the food I had brought away with me the day before from Smitwood; but I gulped it down heartily, and hoped for something better. There will be so much complaining, I fear, in my tale ere it is done that I think it well to put down all my praise of the place and the hours which passed pleasingly.

By this time I was on a little plateau near the great black hill of Coomb Dod, a place whence three streams flow-the Camps Water and the Coulter Water to the Clyde, and the burn of Kingledoors to Tweed. Now, here, had I been wise, I should at once have gone down the lastnamed, to the upper waters of Tweed, near the village of Tweedsmuir, whence I might have come without danger to the wilder hills and the Cor Water hiding-place. But as I stayed there, a desire came violently upon me to go down to the fair, green haughlands about the Holmes Water, which is a stream which rises not far off the Kingledoors Burn, but which flows more to the north, and enters Tweed in the strath of Drummelzier, not above a few miles from Barns itself, and almost at the door of Dawyck. There I knew there was the greater danger, because it lay on the straight line between Abington and Peebles, a way my cousin Gilbert travelled often in these days.

Now in Holmes Water glen there dwelled many who would receive me gladly, and give me shelter and food if I sought it. There were the Tweedies of Quarter and Glencotho, kin to myself on the mother's side, not to speak of a score of herds whom I had dealings with. But my uppermost reason was to see once more that lovely vale, the fairest, unless it be the Manor, in all the world. I know not how I can tell of the Holmes Water. It tumbles clear and tremulous into dark-brown pools, in the shallows it is like sunlight, and in the falls like virgin snow. And over all the place hangs a feeling of pastoral quiet and old romance, such as I never knew elsewhere.

Midday found me in the nick of the hill above Glencotho debating on my after-course. I had it in my mind to go boldly in and demand aid from my kinsman. But I reflected that matters were not overpleasant between us at the time. I knew that in any case if I entered they would receive me well for the honour of the name; but I am proud and like little to go to a place where I am not heartily welcome. So I resolved to go to Francie Smail, the herd, and from him get direction and provender.

The hut was built in a little turn of the water beneath a high bank. I knocked at the door, not knowing whether some soldier might not come to it, for the dragoons were quartered everywhere. But no one came save Francie himself, a great godly man who lived alone, and cared not for priest or woman. He cried aloud when he saw me.

'Come in by,' he says; 'come in quick; this is nae safe place the noo.'

And he pulled me in to the hearth, where his midday meal was standing. With great goodwill he bade me share it, and afterward, since he had heard already of my case, and had no need for enlightenment thereon, he gave me his good counsel.

'Ye maunna bide a meenute here,' he said. 'I'll pit up some cauld braxy and bread for ve. for it's a' I have at this time o' year. Ye maun get oot o' the glen and aff to the hills wi' a' your pith, for some o' Maister Gilbert's men passed this morn on their way to Barns, and they'll be coming back afore nicht. So ve mann aff. and I counsel ye to tak' the taps o' the Wormel, and syne cross the water abune the Crook, and gang ower by Talla and Fruid to the Cor. Keep awa' frae the Clyde hills for ony sake, for they're lookit like my ain hill i' the lambin' time; and though it's maybe safer there for ye the noo, in a wee it'll be het eneuch. But what are ye gaun to dae? Ye'll be makin' a try to win ower the sea, for ye canna skip aboot on thae hills like a paitrick for ever.'

'I do not know,' said I. 'I have little liking for another sea-journey, unless all else is hopeless. I will bide in the hills as long as I can, and I cannot think that the need will be long. For I have an inkling, and others beside me, that queer things will soon happen.'

'Guid send they dae,' said he, and I bade him good-bye. I watched him striding off to the hill, and marvelled at the life he led. A strange life and a hard, yet no man knows what peace may come out of loneliness.

Now, had I taken his advice I should have been saved one of the most vexatious and hazardous episodes of my life. But I was ever self-willed; and so, my mind being set on going down the Holmes Vale, I thought nothing of going near the Wormel. I set off down the bridleway, as if I were a king's privy-councillor, and not a branded exile.

I kept by the stream till patches of fields began to appear, and the roofs of the little clachan. Then I struck higher up on the hillside, and kept well in the shade of a little cloud of birktrees which lay along the edge of the slope.

Soon I came to a spot above the bend of the water near the house called Holmes Mill. There dwelt my very good friend the miller, a man blessed with as choice a taste in dogs as ever I have seen, and a great Whig to boot—both of which tricks he learned from a Westland grandfather. Lockhart was his name, and his folk came from the Lee, near the town of Lanark, to this green Tweedside vale. The wish took me strongly to go down and see him, to feel the wholesome smell of grinding corn, and above all, to taste

his cakes, which I had loved of old. So, without thinking more of it, and in utter contempt for the shepherd's warning, I scrambled down, forded the water, and made my way to the house.

Clearly something was going on at the mill, and, whatever it was, there was a great to-do. Sounds of voices came clear to me from the mill-door, and the rush of the water sang ever in my ears. The miller has summoned his family to help him, thought I. Probably it is the lifting of the bags to the mill-loft.

But, as I came nearer, I perceived that it was not a mere chatter of friendly tongues, but some serious matter. There was a jangling note, a sound as of a quarrel and an appeal. I judged it wise therefore to keep well in the shadow of the wall and to go through the byre and up to the loft by an old way which I remembered—a place where one could see all that passed without being seen

of any.

And there, sure enough, was a sight to stagger me, Some four soldiers, with unslung muskets, stood in the court, while their horses were tethered to a post. Two held the unhappy miller in their stout grip; and at the back his wife and children were standing in sore grief. I looked keenly at the troopers; and, as I looked, I remembered all too late the shepherd's words. They were part of my cousin's company; and one I recognised as my old friend, Jan Hamman of the Alphen Road and the Cor Water.

The foremost of the soldiers was speaking:

'Whig though you be,' said he, 'you shall ha'e a chance of life. You look a man o' muscle. I'll tell you what I'll dae. Turn on the sluice and set the mill-wheel going, and then hand on to it; and if you can keep it back, your life you shall ha'e, as sure as my name's Tam Gordon. But gin you let it gang, there'll be four bullets in you afore you're an hour anlder, and a speedy meeting wi' your Maker. Do you wish to mak' the trial?

Now the task was hopeless from the commencement, for, big though a man be-and the miller was as broad and high a man as one may see in Tweeddale-he has no chance against a mill-race. But whether he thought the thing possible, or whether he wanted to gain a few minutes' respite from death, the man accepted, and took off his coat to the task. He opened the sluice and went forward to the wheel.

Soon the water broke over with a rush, and the miller gripped a spoke like grim death. For a moment the thing was easy, for it takes some minutes for the water to gather body and force. But in a little it became harder, and the sinews on his bare arm began to swell with the strain. But still he held on valiantly, and the wheel moved never a jot. Soon the sweat began to run over his face, and the spray from the resisted water bespattered him plentifully. Then the strain became terrible. His face grew livid as the blood

surged to his head, his eyeballs stood out, and his arms seemed like to be torn from their sockets. The soldiers, with the spirit of cruel children, had forgot their weapons, and crowded round the wheel to see the sport.

I saw clearly that he could not hold out much longer, and that, unless I wanted to see a friend butchered before my eyes, I had better be up and doing. We were two resolute men, I armed, and with considerable skill of the sword; he unarmed, but with the strength of a bull. most dangerous things about our opponents were their weapons. Could I but get between them and their muskets, we could make a fight for it yet.

Suddenly, as I looked, the man failed. With a sob of weariness he loosed his hold. The great wheel caught the stream and moved slowly round, and he almost fell along with it. His tormentors laughed cruelly, and were about to seize him and turn back, when I leaped from the loft-window like a bolt from the clear sky.

My head was in a whirl, and I had no thought of any plan. I only knew that I must make the venture at any cost, or else be branded in my soul as a coward till my dying day.

I fell and scrambled to my feet.

'Lockhart,' I cried; 'here, man-here. Run!' He had the sense to see my meaning. Exhausted though he was, he broke from his astonished captors, and in a moment was beside me and the weapons.

As I looked on them, I saw at a glance where our salvation lay.

'Take these two,' I said, pointing to the muskets. 'I will take the others.'

I cleared my throat and addressed the soldiers. 'Now, gentlemen,' said I, 'once more the fortune of war has delivered you into my hands. We, as vou perceive, command the weapons. I beg your permission to tell you that I am by no means a poor shot with the musket, and likewise, that I do not stick at trifles, as doubtless my gallant friend, Master Hamman, will tell you.'

The men were struck dumb with surprise to find themselves thus taken at a disadvantage. They whispered for a little among themselves. Doubtless the terrors of my prowess had been so magnified by the victims in the last escapade to cover their shame that I was regarded as a veritable Hector.

'Are you the Laird of Barns?' said the leader at last, very politely.

I bowed.

'Then give us leave to tell you that we are nane sae fond o' the captain, your cousin,' said he, thinking to soothe me.

'So much the worse for my cousin,' said 1.

'Therefore we are disposed to let you gang

'I am obliged,' said I; 'but my consin is my cousin, and I tolerate no rebellion toward one so near of blood. I am therefore justified, gentlemen, in using your own arms against you, since I have always believed that traitors were shot.'

At this they looked very glum. At last one of them spoke up, for, after all, they were men.

'If ye'll tak' the pick o' ony yin o' us, and stand up to him wi' the sma'-sword, we'll agree to bide by the result.'

'I thank you,' I said; 'but I am not in the mood for sword-exercise. However, I shall be merciful, though that is a quality you have shown little of. You shall have your horses to ride home on; but your arms you shall leave with me as a pledge of your good-conduct. Strip, gentlemen.'

And strip they did, belt and buckler, pistol and sword. Then I bade them go, not without sundry compliments as one by one they passed by me. There were but four of them, and we had all the arms, so the contest was scarcely equal. Indeed, my heart smote me more than once that I had not accepted the fellow's offer to fight. The leader spoke up boldly to my face:

'Ye've gotten the better o' us the noo, but it'll no' be long afore ye're gettin' your kail through

the reek, Master John Burnet.'

At which I laughed, and said: "Twas a truth I could not deny."

(To be continued.)

CHINESE TIN-SMELTING.

By E. H. PARKER.



different times I have visited the tin-mines at Maliwun, in the Burmese province of Mergui; at Renoung, Kopah, and Tongkah, in Siam; and at Taiping, capital of the British protected state of Perak.

In all five cases I found that both mining and smelting were in the hands of intelligent Chinamen; and, as there is considerable similarity in the systems of working adopted at each place, one general description will answer fairly well for the whole three provincial centres, all of which are in the Malay peninsular sphere.

At Taiping the tin-mines cover an area of several square miles, and are worked almost entirely by Cantonese. They resemble nothing so much as the gold-washings of California and New Zealand: that is, a tin-washing is a series of delphs or hollows, like an ordinary English quarry, except that there is no stone. The sand or rubble is excavated and conveyed to the troughs, which are placed at a sufficient height to allow of the water running freely down an incline; one man rakes up to the topmost end the flakes of tin, which resemble bits of black pencil-lead, and which, when disengaged from all mud or other light clinging matter, sink at once to the bottom of the inclined trough. Other labourers pick out the larger stones from the rubble; whilst a man, stationed at the bottom of the trough, pushes up the accumulated mud from which the lead is not yet quite separated, so that it may pass through a second or third course of washing. The leaden ore is then carried in buckets to special cleansing houses, and there thoroughly washed once more. The furnace looks like a goodsized wine-cask set on end, but at a slight angle, and, as in the case of the alum furnaces which I described in the December number of Chambers's Journal (1897), each one is provided with an iron pan for a base. This iron pan, together with a number of cooper's hoops twined round the baked

mud, serves as a stiffening, and helps to keep the furnace from collapsing. The lead ore is thrown, together with the charcoal which melts it, in one mass into this barrel-like furnace, when the molten metal soon passes through the charcoal and escapes (through a vent in the side of the lower portion of the barrel furnace) into a small pit dug into the ground below. The fire is kept active by a primitive but very effective bellows, consisting of a hollowed tree fitted with a wooden piston, and connected with the furnace by a short bamboo tube inserted into its side. The whole apparatus only costs (at present rates of exchange) fifty shillings. A workman rakes the slag out of the pit, and if the market price of tin is sufficiently high to make it pay to do so, this slag is passed a second time through the furnace. The pure molten tin, freed from the slag as it simmers in the pit, looks like so much quicksilver. No doubt many of our readers will have seen the tin in marketable form as it arrives in England; the 'pigs' are like so many large bricks, with one side rounded and the other flat, the flat side having a broad rim or border. The explanation of this is that blocks of wood of precisely this shape are pressed into the sand or mud which forms the natural floor of the smelting houses; when these wooden moulds are removed, of course corresponding holes remain, and into these holes the molten lead is ladled from the pit. It takes a whole day to cool sufficiently to get firm; when it has well set, it is lifted or dragged out of the holes with long rakes and dashed with water. After a little more cooling it is ready for shipment. When I was at Taiping, various Europeans (and even Chinese) had tried the effect of machinery; but, with the exception of steam-pumps, which were found cheaper than the ordinary Chinese chain-wheel worked like a treadmill by a number of coolies, no machinery had been able to conipete with the exceedingly inexpensive and simple apparatus above described. But, five years later,

after I had seen the Burmese and Siamese mines, I found that British persistency had at last conquered all difficulties, and that a large steamsmelting establishment had been started upon one of the small islands in Singapore harbour. I visited this, and found that it now paid the Chinese washers better to send their ore down to Singapore to be smelted wholesale. Except that, instead of a mud barrel, the furnaces were better made and larger, and that, owing to the aid of steam, there was a certain amount of economy in movement, fuel, carriage, &c., the steam-smelting apparatus showed to my inexperienced eye no particular 'points' over the primitive Chinese gear. However, the company was making money.

At Perak in 1888, and at Maliwun in 1893, I found that four or five Chinamen could turn out seven hundredweight of tin pigs a day, worth (in 1893) about £28 in all. The Maliwun Chinamen were mostly from Amoy, but more than a fourth were from Canton.

The Renoung tin-mines in 1893 produced about

five hundred tons a year, of which amount the Chinese rajah in charge of the state himself exported one quarter. The pigs are only a trifle over half the size of those smelted at Perak. Work went on night and day, each set of men taking four hours at a time. There were nine furnaces to do the work of twenty mines; and wages ranged from twelve shillings to a pound a month (at present rates of exchange), with unlimited meals of rice and salt fish. The hardest work is the bellows-blowing, which has to be done in short spells of an hour, or even half-an-hour, at a time.

At Kopah there was a Dutch auditor in charge of the native rajah's state accounts. The export of tin thence is much greater than that from Renoung, and there are as many as twenty furnaces. The Siamese government takes a toll of one pig out of every six, besides levying an export duty of about a shilling the hundredweight. Here and at Tongkah the labouring population chiefly consists of Fukien Chinese; and the tin production presents no novel features beyond what I have described above.

THE LOOTING OF THE LY-CHEE.

By John Arthur Barry, Author of Steve Brown's Bunyip; Last Voyage of Martin Vallance, &c.



ASTAH, mastah, you no lemember me?'

'No,' I replied, peering out of my bunk at the yellow, slanteyed face that looked down at me and then to the door as if fearful

of something behind.

'No lemember Cabbagee Jimmy, eh? Long time ago, Austlalia—Mellyong—station—dlought—eh. Now lemember, eh?'

And while the man spoke there came to mind memories of a far-away land, of torrid heat, of dead and dying sheep and cattle, of all the horror of an Australian drought, with amongst them one grateful recollection of a patch of verdure, sole thing, almost, that made life endurable at desiccated, God-forsaken, hateful Merryong. Why, of course, I remember 'Cabbagee' now, and how patiently during all those long rainless months he strove to keep the station in 'green stuff,' carrying water to the ash-heap called garden, morning, noon, and night, in his struggle against nature in that drear western wilderness.

And now, as I sat in my pyjamas on the edge of my bunk and looked at the bullet-headed ugly beggar, I felt quite pleased at the unexpected meeting, little thinking that it would turn out so badly for poor Jimmy. I suppose my face showed my thoughts, for he grinned, exhibiting all his discoloured fangs of teeth as he said 'All-li! Me cook's mate. S'pose steward catch me here he

givee me hell! No gammon! Me see you come on board. You look out! Bad lot sailah fellah. All Amoy men. You no tell I say,' and, drawing a long finger suggestively across his throat, Jimmy disappeared.

Talk about the world being wide! Why, it was about ten years ago since, giving up squatting in disgust, I had gone back to my old profession, medicine, and practised mostly ever since in Sydney and Melbourne. Now, taking my first holiday in the East, I must needs stumble across 'Cabbagee Jimmy,' transformed into cook's mate of the Lychee, a coasting steamer in which I was making a trip from Singapore to Swatow. And as I sat there, through my mind ran thoughts of these longgone dreary days of hopeless struggle with drought and disaster on ever-dry back-creeks; of the sultry stifling weather with never a break for months, whilst ruin was spelling itself slowly out, and the stink of rotting carcasses mingled with that of the gidyea. Merryong, yes, I 'lemembered' all right now! But what did Jimmy mean by his warning? It might be serious, and perhaps I had better tell the skipper at once. So, getting on deck, I ascended to the bridge. It was a beautiful morning, and the Ly-chee was punching along with the coast well in sight on the port hand, and a whole crowd of Chinese trying to put some kind of order into the cargo which lumbered the craft fore and

I was the only white passenger; but occupying

a large deck cabin next to me were three Chinese gentlemen who I had heard were going to start business in Swatow as bankers. And, to judge from the pile of iron-bound boxes that filled a spare berth, they seemed to have brought lots of stock in the shape of dollars with them. They were quiet folk, well-mannered after their fashion, courteous and polite, but unable to speak a word of English, even the vile 'pidgin' universally in vogue, therefore our intercourse was limited.

Nothing was farther from my mind than to pose as an alarmist. Moreover, I had my doubts as to how the skipper, who was inclined to be bumptious and to fancy that he and his little iron tank owned the ocean, would take any warning from a stranger and a new chum. Also, I knew that times were quiet, gunboats plentiful, and pirates fast becoming an anomaly. Still, the exgardener of Merryong's words, few and slight as they were, had carried conviction with them. I had seen, too, that Jimmy was badly frightened. Therefore, considering all this, I felt it my duty to tell the captain our conversation word for word. He received it very much as I expected he would, perhaps rather more so.

'Pooh,' said he with a supercilious laugh, 'the fellow was only taking a rise out of you. Of course, some years back, we all had to go armed and keep a bright lookout. But now-why, I don't think there's a pistol amongst us! It's only raw passengers that get scared. My crowd's all right. They were especially recommended by Liuchang, the company's compradore. Nor, in any case, would they be game to play any hanky-panky on me: I'm too well known. The other passengers, yonder, have got about thirty thousand taels on board, and you bet they wouldn't have shipped with me if they'd had any doubts, 'Bliged to you, mister, all the same. But don't be alarmed, nor raise a scare amongst the others if you can help it. You'll see Swatow, and the Ly-chee too, safe enough.' Which, after results considered, has always struck me as a good example of one of those random remarks that, after the event, one thinks a most perverse and unkind fate must have put into the speaker's mouth.

Besides the captain and myself, the only other Europeans on the *Ly-chee* were the two mates and the chief engineer, the second being a Malay of peculiarly villainous aspect.

Of course, my story being thus made light of by the captain, I could not very well, even if I had wished to do so, have gone with it to his subordinates—all the more so as their personalities were in no way inviting; the two deck officers being merely Straits Settlement beach-combers, hunted by the police into so much activity as would earn them a few dollars for a spree before the next bout of loafing. This much a friend in Singapore had told me; adding, however, for my comfort, that they would serve as well as the best for a short passage. The engineer was of a different

stamp—a big Aberdonian, and a decent man enough; but one who I felt would be little inclined to trouble himself with anything out of his own beaten routine.

I, however, determined to have another talk with Jimmy, and see whether I couldn't get something a little more definite from him. But he fought very shy of me; and it was late that night before I succeeded in cornering him alone in the bit of a sentry-box they called the pantry.

'Now, Jimmy,' I said without preamble, 'let's hear all about this business. You know!' and I took up a knife that lay handy and put it to my throat. 'Come on; fire away. I'll see that nobody does you any harm. What are your Amoy friends up to—a bit of piracy, eh?'

'No savee; no savee,' replied Jimmy, turning actually green with fear, whilst showing the whites of his eyes in a horrible manner as he stared over my shoulder. 'What you wantee? Me cook's mate. No savee,' he continued as, turning, I found myself face to face with the steward, a tall Chinaman with a long, broad, red scar running down the side of his left cheek from ear to chin, giving him a very truculent look.

'Me steward, sah,' said he, darting a most malignant glance at Jimmy. 'Sheef steward. You wantee watah: me blingee you. Sodah-wattah, blandee, leemon quash, whissakkee; all bling s'pose you wantee.'

Just at this moment up came the second engineer with a badly-torn finger; and, realising that I had somehow got Jimmy into trouble with my evidently-overheard question, I took the evil-faced Malay into my berth and dressed the wound.

'Are there many Amoy men on board the Lychee?' I asked presently.

'None at all, that I know of,' he replied. 'Why do you wish to find out?'

'Curiosity only,' I said carelessly; 'I'm studying the different types of Chinese. That's all.'

He grinned and said: 'Well, you'll probably have a good chance if you're going in for that sort of thing. Can't say I'm fond of them myself. I'm Batavia-born, and that's a cut above a Chinaman, isn't it?'

'Very much so indeed,' I replied politely, although the man was uglier even than poor Cabbagee Jimmy. 'Then you can't give me any information about the men we have with us now?'

'None,' said he; 'and perhaps it would be as well,' he added, with a nasty look in his snakelike eyes, 'if you were not too inquisitive. There's a hint worth all you've done for my finger,' and off he went to his engine-room again, leaving me with a firmer opinion than ever that there was mischief brewing on board.

That same night, sitting on the deck enjoying the cool breeze blowing off the land, I was startled by seeing what appeared to be a big fire right ahead, which burnt for a minute or two and then went out.

'It's a junk showing a flare,' I heard the second mate say to the captain on the bridge immediately above me.

'Blast 'em,' growled the skipper; 'the brutes are always getting in the road! I've run a few down in my time, an'll serve this fellow the same if he doesn't clear out,' and seizing the siren-wire, he loosed a blast that made me start.

It was dark, but away in the east astern a lightening of the sky showed where the moon would soon rise. 'Port your helm!' shouted the skipper presently to the Chinese quartermaster.

'Portee!' replied the man from where he stood at the wheel, right aft; for the Ly-chee was an old-fashioned tank, built before the days of 'mid-

ship 'steerage.

All at once, looking up, I saw that the bridge was crowded with men, their dark forms outlined against the sky. There was a scuffle; the report of a pistol; then another; then the sound of bodies crashing on to the cargo fifteen feet below.

As I jumped to my feet the Ly-chee slowed, and I heard a shot in the engine-room. Before I could decide on anything, there was a rush of men against me, and I was forced back in my chair, and tied so thoroughly, hand and foot, that I lay like a log. Then the steamer stopped altogether, and lay gently heaving to the swell. I called to the captain, but there was no reply. Also, I saw the bridge was empty. Astern, the moon had risen like a globe of palest, purest silver. A little way from me the Chinese passengers were screaming. I had never heard men scream before, and it made me shiver. It was exactly the long-drawn screaming of a pig when he first feels the knife. And, as yet, nobody had touched them. But the crew, headed by the Malay and the steward, were breaking out the boxes of dollars and piling them on deck. Upon these their owners now flung themselves, heedless of the kicks and knocks which presently left two of them senseless alongside their treasure.

Meanwhile, the steward, as I shouted again for the captain, came to me, and remarking blandly, 'You make too muchee low,' he coolly bent my head back over the chair, and already had the edge of his long, sharp knife against the skin of my throat when the Malay, noticing him, crossed over and pulled him away from me, saying something to which the other assented, but with evident reluctance.

"He wants to study,' said the brute with a grin, 'wants to pry into the formation of your trachea and jugular (he had, I was told afterwards, been a pet pupil of the Raffles Institute in Singapore), but there's lots of time. And you'd better keep your tongue between your teeth.'

The decks aft were now nearly as light as day; and as the steward walked towards the group busy about the boxes, I saw the one Chinese passenger

who was still conscious, though badly bruised and bleeding from several wounds, rush forward and clasp him round the legs with both arms. As he squatted there, quite silent at last, and with a laughable look of pleading misery on his upturned features, the steward, after gazing at him for a moment, suddenly forced his head back and plunged the knife into his throat. Rolling over and over in his death agony, the unfortunate wretch brought up against my chair, where he lay with a horrible gurgling and bubbling that made my very heart sick to listen to. The other two, his companions, still lay senseless. As I gazed, fascinated, at the horrid spectacle at my feet, with a great creaking of mat-sails and bamboo spars a junk drew alongside and made fast to the Lychee. Evidently this was the one whose signallight we had seen. Hurried greetings seemed to be exchanged, and all hands began to transfer the silver on board the new-comer to the sound of a grunting hi-ya song. The thing beside me had ceased gurgling and gasping, and the moonlight fell on a corpse lying in a thick, black pool that slowly spread about my feet. Although unable to stir, I could view all that passed, and looked anxiously for 'Cabbagee,' but he was nowhere to

The Malay engineer and the long steward were undoubtedly the leaders in this bloody tragedy; and a feeling akin to despair took hold on me when I reflected that, from what I had seen of their tender mercies, probably my own time was near at hand. And, but for the mulish obstinacy of the captain, all might have been prevented! I had no less than three Colt's revolvers with ammunition in my cabin trunk, two of them presents from friends in Singapore to others in Swatow. What might we not have done by a timely display! And now; oh, the pity of it! I wondered whether they intended to kill me where I sat. I wondered, too, I remember, whether it would be of any use telling them that as a doctor I could make myself useful to them if they would spare my life. Not very heroic this, perhaps; but then, again, there's nothing heroic either in having your throat cut like a ration sheep's. I was prepared to go great lengths in the way of eating humble-pie to avoid any such a fate at such hands. Having finished transhipping the silver, together with some of the casks and cases off the maindeck, the pirates, rather to my surprise, dragged along the two as yet unconscious passengers, and threw them heavily on to the junk. Then at last, from somewhere or other, suddenly appeared Jimmy. Fumbling about, apparently to see that my bonds were secure, I heard a zip as one of the strained coir strands flew asunder to the touch of a keen knife. Then came an imperative call, and he fled swiftly into the shadows cast by the junk's great sails just as the steward and the Malay walked up to me. The moon was under a cloud; but they carried a lantern, by whose light

they viewed me all over, soon discovering the knife and the cut rope. I saw the steward examine the knife closely whilst the Malay knotted me up afresh, and more tightly than ever. Then the steward, taking a thick silk kerchief from around my throat, proceeded to effectually gag me. And, seeing that I was not to be done to instant death, I said never a word.

'Good-night, doctor,' remarked the Malay. 'Personally I don't wish you any harm: but you've seen too much. According to my calculations, the Ly-chee will blow up in about a couple of hours. And, anyhow, you'll make a better ending than if Kwa Fung here had his way with you. Good-bye,' and the pair turned and went. A few minutes later I saw the dark sails of the junk swaying to the wind like the wings of some great night-bird, as she glided past the Ly-chee's stern, leaving me alone and helpless with the dead. Save for the ripple of the little waves against the bows, and the grind of chains as the sea twisted rudder and wheel alternately to port and starboard, the ship was silent. In vain I strained my gaze down on to the maindeck, where, amongst the dark hollows and crannies of the cargo, I knew the captain and second mate must be lying, dead or desperately wounded. I could see nothing. For a while I sat there, swathed in ropes, helpless as any mummy, staring over the moonlit sea. Then all at once, as I caught sight of a dark speck far astern, knowing it for the junk, I remembered the Malay's last words, and my thoughts fled to the engine-room; and in fancy I saw the big Scotsman lying there dead, and the fires roaring fiercely under the newly-filled boilers, fast generating steam for whose force there was no outlet but a general burst-up. About another hour and the explosion would take place! And, whilst the cold sweat burst from every pore, I strained and heaved at my bonds until they cut deep into my flesh and I was near choking. Alas! they never slackened an inch. Even the chair was immovable -lashed to the vessel's rail. Before leaving, the pirates had run up the trysail and jib; and these filling on the starboard tack, the steamer was drifting rapidly away seaward from that low, dark line under the moon that I knew must be the coast between Hong-kong and Swatow.

How long had the junk been gone, I wondered. Was my time nearly up for saying good-bye to this world? I must try and pray. But, do what I might, I could not keep my attention fixed. All my soul seemed in my ears; and to the sound of a louder creak amongst the cargo, or a shriller note of the wind in the rigging, my nerves leapt and thrilled expectant of the last dread moment. Truly the sorrows of death compassed me, and the pains of hell came about me, and yet I could not, as I felt I ought to do, make my peace with this world and prepare my soul for the next one. From where I sat, the glass skylight of the engineroom was all aglitter in the pale sheen, and on

this my eyes became fixed with a dreadful intensity. until at last the gleam of the glass seemed to burn them like an incandescent fire. The breeze was cold, but my clothes were wet through with sweat. and I could see it dripping from my finger-tips like water on to the deck. Brave men are said to have waited for death with indifference, fearing nothing. But I think that, in most cases, they had company. And, believe me, it is a very terrible thing to sit bound, helpless, dumb, alone, expecting eternity with each passing moment, and with the agony of a great fear in full possession of both soul and body. I think that if I could have cried aloud, have cursed, or wept, or prayed with an audible voice the strain had lightened. But the gag, although soft and not hurting much, allowed me only the making of inarticulate groans, as I panted for breath and stared with eyes that felt like hot coals, ever fixed fascinated on the moonlit glass of the engine-room. Presently I somehow fell to thinking of a favourite collie-dog I had once owned at Merryong, who, every time he wished to attract my attention, used to beat my legs with his long tail. I fancied that he was doing it now. With an absolutely physical wrench I tore my hot eyes away from the skylight and looked down.

The breeze had freshened considerably, making the Ly-chec tumble about a bit. And with the increased motion the dead Chinaman was rolling slowly to and fro, and bumping his head against my bound ankles. And the shock of meeting those upturned, staring eyes, and the terrible face with its lips curled, grinning back from the stained teeth, and the great gash in the throat opening and closing in ghastly protesting fashion, saved me, I verily believe, by the consideration of a fresh horror, from becoming a raving lunatic.

I do not know what period of time went by while, the awful anguish of expectancy broken, I dreamily and with senses in some sort numbed, stared back at the staring dead man. But I remember wishing I could speak to him, and ask him to lie quietly and leave me alone, wishing too that I could move my feet out of his way and out of the black pool that was gathering around and over the toes of my canvas shoes and spoiling them. But, all at once, there fell on my ears a sound that made me raise my head, and sent a wave of life and hope pulsing through every artery in my body in response to the regular thump, thump of a steamer's screw. Twisting my head round, I saw both her lights coming right down upon the Lu-chee, and distant a bare mile. As she approached I could distinctly make her out to be a long, low, double-funnelled boat going through the water at a great rate. Suddenly I lost the green light. She was keeping away! Then the red one disappeared. She was passing. Thump! thump! thump! hammers beating on my heart; and the stream of sparks from her funnels flying into my brain. Impotently, as I realised the full misery of the thing, I groaned and panted forth hoarse noises, audible, perhaps, a yard away. Impotently I writhed and struggled till the taughtened ropes reached the bone on legs and wrists. But ever fainter and fainter came the thump of the screw. And as despair, utter and complete, settled once more into my soul, my head fell on my breast, and once more I entered the dark valley of the shadow, from which I had emerged only to partake of the bitterness of a new death.

Sitting there, scarcely conscious, and with my eyes shut, I suddenly felt that some strong, strange light was beating on their lids. Looking up, I saw that the whole ship and the sea round about it were enveloped in a bright white glare that seemed to dart into and rest on every part of the Ly-chee. In my first surprise I imagined that this perhaps was but a blaze preparatory to the explosion I had been so long expecting, a notion as instantly dismissed, as I heard, almost alongside now, the loud thumping of a screw, and saw the steamer, not two hundred yards away, playing on the Ly-chee with her searchlight. Then, as if thoroughly to bear into me the blessed truth, a voice hailed, 'Steamer ahoy!' But I could give them no signal. And during a few minutes of such agonised suspense as I know I shall never be permitted to pass through again -God being too merciful for that-I heard the sweetest music the world then held for me, the swift cheep through their blocks of a boat's davitfalls. Then it seemed but a second or two until hearty, wholesome English faces were looking into mine, and ready hands cutting away at my bonds and removing the gag, whilst there came to my ears, as if from a very far distance across the sea. expressions of wonder, execration, and pity. They told me afterwards that before I swooned, as I did directly they assisted me to my feet, I muttered the one word, 'Boilers!'

When I came to myself again it was sunrise, and I was lying on a mattress spread on the after skylight of H.M. gunboat *Psyche*, my wrists and ankles swathed in bandages, and the taste of strong

brandy in my mouth.

'The infernal villains!' exclaimed the captain, as to him and his officers I told my story, brokenly, and with long pauses, for I was weak and feverish. 'But, if we have any luck, we may punish them yet; the wind's been against them all night. Where'll they be, Mr Courtenay?'

'Off Tin-ko Point, sir,' replied the first lieu-

tenant, 'by my reckoning.'

'Exactly the place I had in my mind,' said the captain. 'We can fix them up yet, I do hope and believe. Now,' he went on, addressing me, 'don't exert yourself. The doctor, here, says you'll be all right in a day or two. There's the Ly-chee just astern of us. Her captain and one of his mates we found dead, stabbed and shot, thrown off the bridge, as you told us, amongst the deck cargo. Another white man lay in his bunk with

his head smashed to pieces. The engineer was lying across one of his cylinders, shot through the heart. As for the boilers, well, my chief tells me that as they were worn to the thinness of brown paper, and liable to go at any minute, it was simply a miracle how they stood the extra pressure, and with the valves wired down into the bargain. We buried all the dead at daylight. And I hope,' continued he—looking very grim as he gave the order 'Full speed ahead!'—'that we'll be able to do more burying, but of another sort, before night.'

By breakfast time it fell dead calm, and our hopes rose as, keeping so close inshore that we at times could almost have thrown a biscuit on the rocks, we flew along the coast, leaving the Ly-chee with her salvage crew to come on at her

leisure.

The Psyche was one of the new torpedo gunboats, with engines of nearly 5000 horse-power, drawing only ten feet of water, armed with quickfiring guns and five-barrelled Nordenfelts. And as I looked ahead and saw the mounds of white water rising from her bow, and felt the decks quivering underneath me, and knew she must be doing a good eighteen knots, there filled my soul, for the first time, a savage longing for vengeance on the bloody and murderous authors of all my sufferings throughout that past but never-to-beforgotten night.

Late that afternoon a large junk with all her sweeps out was sighted just winding a thickly-timbered cape which they told me was Tin-ko. If, indeed, this was the craft we were after, then our luck was undoubtedly in. But, of course, I could not recognise her again. All hesitation, however, on that point was soon set at rest, for, when we rounded Tin-ko, we found the chase had anchored, and that a big boat full of men was hurriedly pulling for the shore. Getting his glass to bear, the captain sang out to me, 'Is there a half-caste or Malay amongst the crowd?'

'Yes,' I replied, 'he was the assistant-engineer.'

'And a Chinaman with a scar like a broad burn across his face?'

'The steward,' I said, 'and, with the other, the ringleaders of the whole affair. Can you see the two prisoners?'

'No,' said the captain. 'But they may be in the bottom of the boat. Ready with the port Nordenfelt, for ard there, and fire when you're loaded.

I think they 're in range.'

Rising on my elbow as the gun crashed, I saw the bullets splashing white water all around the boat, between which and ourselves every moment decreased the distance, at the tremendous rate we were going, shoaling our depth, too, as I could hear every minute by the cries of 'And a half-eight!—quarter-less-seven—six fathoms!' that reached me from the chains.

All at once I saw the captain touch the telegraph and motion to the helmsman. The Psyche

slowed, then came round on her heel, broadside on almost to the boat, which, by now, was close in to the rocks. Crash! crash! crash! pealed the whole port battery; and when the smoke cleared away only a couple of black heads were visible, bobbing up and down amongst the wreck of the boat, smashed literally into matchwood, while from the leadsman came a short, quick cry of 'By the mark, twain!' It was a splendid piece of work, and we had just two feet to spare between our bottom and the rocks of Cape Tin-ko.

'Only just in the nick of time,' said the captain, walking along from his bridge to where I lay. 'Now, doctor, I think you can cry quits. As for the silver, probably that's gone, although there may be just a chance that when they saw our smoke they left it on board the junk. We'll see, presently, when the boat returns. Yes, of course, I'm sorry for your man and the two passengers. But we couldn't stop to discriminate, you know. Another three minutes and they would have been in the bush yonder. Let us hope that fortune has been kind, and that "Jimmy" at least may be one of the survivors.'

But, strangely enough, the pair turned out to be the Malay and the steward, and both so badly wounded that they only lived a very short time after being put on board the *Psyche*.

Meanwhile, the gunboat had steamed alongside the junk, only to find her, with the exception of a few odds and ends of the stolen cargo, quite empty. Already, the cutter was under the davitfalls, and being hooked on, when a shout of surprise from the men in her caused me to follow their pointing fingers towards the bows of the

junk, where, apparently just come to the surface, floated a dead body.

'By Jove, sir,' suddenly exclaimed the first lieutenant to the captain, 'both her anchors are on deck. What can she be riding to? There's something curious about that.'

'Get on board,' ordered the captain to the young sub. in charge of the boat, 'and haul up her cable. Pick that body up as you go, and bring it back with you.'

After some trouble, the men hove up the stout coir hawser, at the end of which they found securely lashed not only the boxes of dollars but two more bodies—those of poor Cabbagee Jimmy and one of the Chinese passengers. Of the latter also was the corpse that had slipped its moorings and risen to tell us, it almost seemed, what had become of the money. On none of the bodies was any mark of mortal wound; and, without a doubt, the three unfortunates had been bound alive to the rope and thrown overboard, thus not only making more room in the boat, but enabling the steward to punish Jimmy for his attempts to befriend me.

Some years have gone by since I found myself the sole survivor of the looting of the Ly-chee. But, even now, at long intervals, I wake from my sleep o' nights with a start and a shudder, as, in my dreams, bloody memories flit across my brain. Nor, somehow, can I ever bring myself to sit in a lounge chair, or tolerate the sight of white canvas shoes. I have heard people, noting these peculiarities, remark that I am affected. Perhaps you, who know, may agree with me that there is some little reason for such affectation.

THE MONTH: SCIENCE AND ARTS.

THE CRYSTAL PALACE.



R some years there have been rumours that the Crystal Palace—which was reared in great part from the materials of the great Exhibition of 1851, and opened by

Her Majesty the Queen four years later—was doomed, and that its lovely gardens were to be handed over to the jerry builder. We are glad to say that no fear on this head need now be felt. The beautiful Palace—the largest place of public entertainment in the world—is to be renovated and started on a fresh lease of life; not the least important part of the reconstruction scheme being improvements in the railway facilities and in the commissariat department. This is good news for the general public, for the Palace, besides being a beautiful place of resort, has done much in the cause of education, and for many years has been closely

identified with musical progress in this country, its classical concerts and its periodic Handel Festivals being of world-wide fame. It is strange to note that when the Palace was first founded music had no place in the scheme. Indeed, when the late Dr Gauntlett suggested the simultaneous playing of several organs placed about the building and electrically connected with one keyboard, he was told by one of the directors that he had strangely misunderstood the high aims of the Crystal Palace; nothing so trivial as music would ever be heard within its walls.

PHOTOGRAPHY WITHOUT CAMERA OR LENS.

This would seem to be an impossibility, and perhaps we might have so regarded it had we not seen the excellent specimens recently exhibited by the author of the process, Mr J. H. Player. The method is applicable only to the reproduction of drawings, book-illustrations, and the like, and is conducted with the simplest.

apparatus imaginable. Suppose, for example, we want to copy an engraving from a book. First of all the book is placed open in a horizontal position, and beneath the page to be copied rests a sheet of plate-glass. Face downwards on the print, and in contact with it, is laid a piece of bromide paper such as photographers use for enlarging purposes. This is kept in position by two sheets of plate-glass, and above all is laid a sheet of pot-metal or photographic green glass. Fifteen inches above, a gas burner-preferably of the triple kind used for billiard tables-is lighted for about ten minutes; after which the bromide paper is developed into a negative, from which any reasonable number of copies can be printed photographically by the usual methods. It is necessary that the sensitive bromide paper be handled in yellow or red light only; and it will be observed that although no lens or camera is employed, some knowledge of photographic manipulations is needful.

THE ROMANCE OF FISH-LIFE.

An interesting lecture with the above title was recently given in London by Dr C. S. Paterson. After tracing the life-history of several of our more important food-fishes, the lecturer dealt with several hard facts connected with our fisheries which call for immediate legislation. Owing to the action of steam-trawlers, in which one-half the capital of the trade is now invested, the rich grounds of the North Sea have been fished out; and now the vessels have to go as far as the Bay of Biscay and the west coast of Ireland, and even to Iceland, in order to get paying hauls. All flat fish have decreased in size-for they are not allowed time to reach full maturityand have increased in price at least twenty-five per cent. The sole has trebled in value during the past twenty years; and this, with the turbot and the brill, will most surely become extinct unless remedial measures are adopted. It is not only the steam-trawlers that are responsible for this disaster; the constant churning of the waters by screw-propellers and paddle-wheels must kill myriads of young, and destroy the floating eggs; 'so that many a vessel carrying cargo from port to port must leave in her wake a very slaughter of the innocents.' A consideration which will perhaps appeal most forcibly to our legislators is that the steady reduction in the number of our fishermen, now forty per cent. less than in 1870, means that we can no longer rely upon that source for recruits for our navy. The mercantile marine, it is well known, is now principally represented by Lascars, Swedes, Portuguese, and shore-loafers.

CHILDREN'S SIGHT.

According to Mr Brudenell Carter, one of our leading oculists, nearly sixty per cent of the

children attending the London Board Schools do not see as acutely-that is, as well and sharplyas they ought to do. This defective state of the vision is often noticeable with healthy and approximately well-formed eyes, and he attributes the fault to town surroundings. Very few persons know what their children ought to be capable of seeing, although they will know very well how far a child of, say, ten would be able to walk or run, and what weight it might be expected to carry. The eyes of every child should be tested on entering upon school-life, and if shown to be subnormal, advice should at once be sought. The training of the eyes was, in his opinion, quite as important as physical drill, to which so much time was already devoted; and he would be inclined to place excellence of vision among the various physical qualifications which were habitually tested by competition. A seeing contest might at first seem strange; but it could not fail to be of benefit in diffusing a knowledge of what sight ought to be, and it would bring a number of eyes under systematic training, to the advantage of their owners and to posterity.

INLAID WOODWORK FOR AMATEURS.

Amateurs are always eager to welcome any new field of work in which their artistic powers can be exercised, especially if it aid them in beautifying their home and belongings. 'Tarsia,' a new method of inlaying wood which has been introduced by the editor of The House, would seem to answer this end, for the results obtained by it are really artistic, and there is nothing more technical in its practice than can be easily mastered by any intelligent person. 'Tarsia' is a kind of spurious marquetry, and the method of working it is to cut out from various veneers the different portions of a design, to affix them to a base-board, fill in the unavoidable cracks in the mosaic, and finally to rub down and polish the surface. The specimens of the work which we have had an opportunity of examining are admirable in their effect, and it is not easy to realise that they have been produced by such very simple means.

SMOKELESS FIRES.

The Berlin correspondent of the Times has given some particulars of a new invention by one Carl Wegener, which has for its object the elimination of smoke from a furnace, accompanied by a notable saving in the consumption of coal. This invention, we are told, is shortly to be brought before the British public in the form of the usual limited company. The success of the system depends upon feeding the furnace with powdered coal, instead of the 'well-screened' lumps which have hitherto been regarded as the most advantageous form of such fuel. The coal-dust is fed into the fire from a container in front by means

of a tube which terminates in a revolving sieve. This sieve is kept in motion by the draught, and has the effect of scattering the fuel over the furnace in such a way that it is at once inflamed without smoke and with very little ash. Coal of comparatively low quality can be economically used in this powdered form, and the only drawback to the process seems to be the necessity for using a separate machine for the grinding of the coal to powder. On the other hand, the slack or dust which forms a necessary by-product of the coal industry will find here a field for employment which will be much appreciated by owners of mines and merchants generally.

TOBOGGANING IN PIEDMONT IN 1765.

The art and mystery of tobogganing-gliding swiftly down a steep descent squatting on a sled consisting of one or two flat boards without runners—is so often assumed to be of Canadian invention, thence introduced into the United States and Britain, that when we read of the pastime being practised at Davos or other alpine health-resort (as in Miss Harraden's Ships that Pass in the Night), we are apt to take it for granted that this is one of the many innovations brought hither by English-speaking tourists or residents to enliven the monotony of winter in these high and remote regions. Hence it is interesting to note in Smollett's Travels through France and Italy that when the novelist was making an excursion in March 1765, from Nice across the Maritime Alps to Turin, he descended the Piedmontese slope of the Col di Tenda towards Cuneo on a toboggan. 'Having reached the top of the mountain, he tells us in Letter xxxviii., 'we prepared for descending on the other side by the leze, which is an occasional sledge made of two pieces of wood, carried up by the coulants (local guides) for the purpose. I did not much relish this kind of carriage, especially as the mountain was very steep, and covered with such a thick fog that we could hardly see two or three yards before us. Nevertheless, our guides were so confident, and my companion, who had passed the same way on other occasions, so secure, that I ventured to place myself on this machine, one of the coulants standing behind me, and the other sitting before as the conductor, with his feet paddling among the snow, in order to moderate the velocity of its descent. Thus accommodated, we descended the mountain with such rapidity that in an hour we reached Limon. . . . Here we waited two full hours for the mules which travelled with the servants by the common road.' This is simply tobogganing used as a practical means of transit for travellers in the Alps.

A DOMESTIC REFUSE-DESTRUCTOR.

Under the above title Mr J. B. Petter of Yeovil has patented a method of dealing with

household waste which will, on sanitary grounds, commend itself to many. In those highly-favoured parishes where the dust-cart pays each house a daily visit for the collection of refuse such an arrangement is unnecessary; but we all know that the more general rule is to allow the contents of the dustbins to accumulate to a dangerous degree. Mr Petter's 'destructor' is part of the ordinary kitchen-range, the ash-pit of which is closed with a door, thus making a chamber into which all vegetable refuse, fish bones, &c., can be cast. The heat from the fire above speedily robs this waste matter of all its moisture, and in a few hours' time it can be placed upon the fire and consumed. All greasy matter is absorbed by the ashes, and a constant draught is ensured through the mass of refuse by air-holes in the door of the destructor. We understand that any ordinary kitchen-range can be fitted with the invention at moderate cost.

ASBESTIC.

This new fire-resisting cement has lately been subjected to a careful test in Germany, and an official protocol has been issued concerning its behaviour, which bears the signatures of several architects, engineers, and other experts. The trial was conducted in a wooden house built for the purpose, the walls and roof of which, and an iron girder supporting the roof, were coated with an inch-thick layer of asbestic. The structure was partly filled and surrounded outside with a mass of shavings and wood chips soaked in petroleum, and the whole was set alight and allowed to burn for about three-quarters of an hour. The fierce conflagration was then extinguished by means of hose, when it was observed that the asbestic showed no sign of either cracking or peeling. When it was at length chipped off in various places, both the iron and wood of which the structure was composed were found perfectly intact. It may be mentioned here that the huge fireproof curtain which separated the stage from the auditorium at the late 'greatest show on earth' at Olympia, London, was coated with asbestic. The source of this new fireproof compound has already been explained in our columns.

RAILWAY PUNCTUALITY.

There recently appeared in the Times a most interesting account of railway travelling in the United States, wherein the writer compared the distances run and the time occupied with similar distances in Britain. The comparison was a fair one, and, truth to tell, it was not to the advantage of the old country. The Americans have, indeed, during the past few years, improved far more rapidly in railway matters than we have on this side of the Atlantic. Not only is the rolling stock better and the locomotives more powerful, but the American lines are served with absolute

punctuality. This is the weak point of our own railway system, and all travellers can point to certain of our trains which are always late, and always have been late. The American roads are quite as crowded as our own, and the rails are generally single, so that really the attainment of punctuality is more difficult in the States than it is here. Some of our lines are notorious for their want of punctuality, and neither protests nor ridicule seem to make the slightest impression upon those responsible for what amounts to a grave public scandal.

A LIFE-SAVING GARMENT.

Mr Donald MacIntyre of Rosehaugh, Ross-shire, has invented a life-saving contrivance which, according to the description with which he has favoured us, seems better calculated to make a person amphibious than any apparatus yet brought out. It takes the form of a sleeveless guernsey, rendered air- and water-tight by indiarubber casing, which is furnished with a tube and nozzle by which the garment can be inflated with air in ten seconds. In its uninflated condition it can be worn for hours without any inconvenience, or can be easily carried in the pocket. One of these garments has been shown to be capable of supporting three men, so that its buoyancy would be of great assistance to any unfortunate who happened to fall into the water and knew not how to swim.

LIQUID AIR.

A new machine for the production of this extraordinary product has been devised by Dr Linde, which in principle is similar to the machines used on shipboard for refrigerating purposes -that is to say, air under pressure is allowed suddenly to expand through a small orifice, and the cold thus produced is made to act upon the unheated compressed air, so that the effect is cumulative. A new use has been found for liquid air, containing a large proportion of oxygen, for it is found that such air when mixed with powdered charcoal possesses explosive qualities comparable with those of dynamite. The rapid evaporation of the liquid would necessarily prevent such an explosive being stored; but when a large amount of blasting has to be done at one place. such as a quarry, for example, this method would have the merit of cheapness.

THE SOUTH AMERICAN CATTLE-TRADE.

The Editor regrets to find that exception has been taken to some statements made in the article 'Revelations of the South American Cattle-Trade,' which appeared in the February part of this Journal, by the owners of two shipping lines engaged in this trade. It may be explained that the article was supplied in the usual way by an old contributor whose good faith there was no reason to doubt. On receiving objections the Editor

immediately communicated with the contributor, who informed him that the statements in question were based on figures received as authoritative from official sources, but which had turned out on examination to be incorrect. The Editor desires to correct the statements referring to the Highland Chief, of which Messrs H. & W. Nelson are managing owners, and to those referring to the Hydarnes and Hippomenes of the Houston line. It was stated that 43 cattle out of 150 placed on board the Highland Chief during 1897 were lost, whereas in the three voyages made last year, out of a total of 329 cattle conveyed, the loss was only 7. In the case of the Hydarnes and Hippomenes of the Houston line, he is assured that the highest mortality in the first-named on any voyage was 36 and not 66, and of the second 41 not 43, in both cases the loss being due not to defective fittings or heavy weather, but to the great heat prevailing at the time of shipment. The Editor regrets that these incorrect figures appeared in Chambers's Journal, and is glad in justice to the owners of these steamers to take this opportunity of correcting them.

THE UNEXPECTED.

'Twas said by one who now has gone. Whose word we all respected, That nothing can be reckoned on Except the unexpected. That saying on a truth lays stress, Which else were undetected, Why contributions to the Press (In my case) are rejected.

I've written trifles light as air, Or e'en a trifle lighter; My trifles unconsidered were And yet my hopes grew brighter. Hope sprang eternal in my breast. And made me hold the tighter The promise that I should be blest, And some day wake-a writer.

Success within my reach I thought, I lavished ink unstinted (One's visions of the future ought To be less rosy-tinted). But now, if I success effect (As I've already hinted), 'Twill be because I don't expect To have these verses printed.

C. J. BODEN.

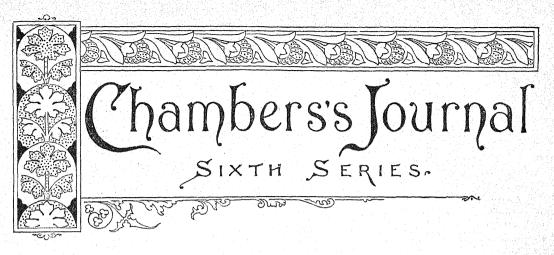
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A MYSTERY OF THE SWORD.

BY E. AND H. HERON.

IN TWO PARTS .- PART I.



HE Englishman who remains for any time abroad generally takes fencing-lessons, and, as the mattre-d'armes will tell you, fences in his own manner. The mattre will say this with studied courtesy; but if you

press him further he will spread out his hands with a gesture full of significance. 'Ah, these gentlemen, they are strong, they are audacious; but for science—pouf!' and again he will take refuge in that comprehensive shrug.

Fencing happened to be a favourite amusement of mine from my boyhood; so that when I followed the example of my countrymen I flattered myself that my knowledge of the art won me a special place in the good graces of M. Desterre, at that time perhaps the first, though not the most fashionable, fencing-master in Paris.

Some years later, while idling through an enforced holiday in Normandy and Brittany, I came across my old friend at Pontorson. I recognised the slight, alert figure at once, and hailed him with delight. He dined with me, and afterwards, as we rose from table, he said to me: 'It is my custom, monsieur, to take a half-bottle of wine at a small inn on the outskirts of the town; I shall feel honoured if monsieur will do me the pleasure of joining me.'

So we walked through the darkening street, where the lamps still hung unlit on their ropes because the moon would rise presently. We found the inn, standing square to the road, its windows mere black apertures in the flat whitewashed walls, for the long gray slatted shutters were all agape to let in the warm summer air, and the customary bunch of mistletoe hung over the door.

Desterre introduced me to the stout and comely hostess, who led us through a gate by the housewall into a portion of the garden set with small round tables, where a modified seclusion awaited the wealthier customers of Madame Bolande, while the low wooden paling separating it from the road

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offered no hindrance to conversation being carried on with the more numerous groups outside,

I noticed that one of these tables was regarded as Desterre's special property; it was empty, and Desterre walked to it, bowed ceremoniously to the occupants of the other tables, and sat down in an absent, methodical manner which suggested habit.

Declining a 'café-cognac,' I joined my friend in his half-bottle.

'It is good,' he remarked, smiling, and balancing his glass between thumb and forefinger. 'From the South. It is of a vintage that never reaches England.' This I had every reason to believe.

So the evening passed in conversation with our neighbours, who presently said good-night and withdrew; but we ordered more wine, and lingered till the moonbeams shone on the brightly-polished table between us that held our wine and cigarettes, and Desterre began to talk of things that had been. This was the real Desterre, quite unlike the bristle of a man I remembered at the fencing-school at Paris. No one could have looked less like that personage with a terrible reputation than M. Desterre of Pontorson. He had a slight, round-chested figure, thin gray hair, thick white moustache, clean-shaven, narrow cheeks, and an expression of pathetic humour.

As for Pontorson, it delighted in his reputation. He was the pride of the town, I learnt afterwardsthis retired fencing-master, who walked with a preoccupied air of dignity to mass on Sundays, and otherwise spent most of his leisure in cultivating roses and lettuces with conspicuous success. Only once had the people of his native town seen their 'grand Desterre' with a foil in his hand; and that was on the occasion of a crack regiment passing through Pontorson, which regiment contained, it was said, the best fencer in the French army. The men treated Desterre with respect and admiration, and the officers invited him for the evening. During the afternoon he was persuaded to cross swords with [All Rights Reserved.] MAY 7, 1898.

his young rival. It was at the Café Vouffel, and Desterre produced the weapons with which he had defeated Verlini in that famous trial of skill of which you will hear to this day in the fencing-schools of Paris; and after seeing that the buttons were fast, he offered the choice of blades to his opponent. There was the ring of meeting steel, a pass, and the officer's sword in the bed of marigolds under the window!

'Yes, monsieur,' he began, 'there is a gap since I left this place forty years ago. In the interval I never returned. I left this Pontorson a young man with dreams, I return old—with memories.'

Unadvisedly I spoke. 'Memories? You must

have many of interest.'

He pulled himself together, threw away his halfsmoked cigarette with a movement of impatience, and busied himself in lighting another before he replied in a different tone:

⁷But—yes. I have been engaged in many peculiar affairs. There was the affair of M. le Capitaine

anglais.'

I saw that I lost some narration more intimate, more privileged; but I accepted with pleasure the story he proposed to give me.

'Was he as awkward a pupil as the rest of us?' I

asked, laughing.

'Ah, monsieur, you are of the lucky few, who begin in early youth, as we do in France; but you cannot teach a man grown to be supple, easy, rapid. The joints and muscles have passed the moment of possible training. They are set. After that—what will you? It is useless.'

'Who was this English captain?' I asked.

'His name was Brerliam—John Brerliam of—I forget what branch of the service. I first saw him on a gloomy day in Paris. I had undertaken a little expedition to the Bois to make my first bow to the approaching summer. On re-entering I was informed that a gentleman was awaiting my return.

'Without it was rapidly darkening, and the sallow sky frowned in through the long windows of the salle-d'armes, which for the moment was empty, though a little later it would be full of my pupils and others, as you remember it. Leaning against one of the pillars at the lower end I perceived my new client, towards whom I advanced with a bow.

"At your service, monsieur."

"That's all right," he replied, "for the fact is I am about to fight a duel."

He was a red-faced, black-haired young man, with a ruffled air and a manner at once hurried, puzzled, and commanding. One liked him at first sight—this big handsome fellow.

"I understand," I said, "Monsieur wishes a leçan de duel to perfect himself; is it not so?"

"Exactly. And the fight comes off the third day from now," he replied. After some further talk we arranged an hour for the morrow, and M. le Capitaine flung into the street in his impetnous manner. 'On his leaving me I tried to recall the details of any quarrels which had reached my ears of late; but in vain; I could recall nothing to fit the case. This Captain Brerliam was plainly an Englishman, about seven-and-twenty years of age, hot-blooded and determined.

'While I was so engaged, my client reappeared.

"Are we alone?" he inquired, glancing round.

"Quite alone, monsieur."

"I have been told that you are remarkable in Paris for two things," he said abruptly, "sword-play and silence."

"Both or either are at your service as you desire, monsieur," I answered.

"The fact is, I am out of my depth in this affair altogether."

"May I ask the name of your opponent?"

"Von Stulbach—Heinrich von Stulbach, a gentleman of Bavaria—or so he says."

"But monsieur suspects—?" I asked, as he paused.

"I'm not here to suspect, but to fight," he answered irritably. "I only wish to know something more about this Bavarian. I met him by chance to-day in a café on the Boulevards. The odd part of it is that he is the third German who has called me out within the last fortnight. I have been some months—during the winter, in fact—in Berlin. The first challenge is beside the question, and need not be considered now. On both the other occasions the quarrel was none of my seeking—forced upon me, in fact, by strangers. The insults of Von Stulbach, for instance, were entirely gratuitous."

"And your second duel-how did that end?"

'He laughed out suddenly and loudly.

"It never came off! The other fellow bolted at the last moment. Good-night. Find out something if you can. I am told that in Paris one can learn anything—for a consideration."

'And again he was gone. He reminded me of a clap of thunder. He absorbed one's attention while he was there, and when he went one dwelt on his words. The personality of the man was engrossing.

'Moreover, the facts he had just imparted to me in connection with his affair of honour were in themselves curious enough to suggest something still more singular in the background. A quarrel was wantonly provoked in Berlin by a stranger, who, nevertheless, failed to appear on the field. Subsequently, a second insult was thrust upon my pupil in Paris. Evidently, a plot existed against him, the second attempt to force him into a duel being made because the first had fallen through.

'Therefore, it was with a good deal of curiosity that I set out to make inquiries. I had, naturally, many acquaintances amongst the police and officials connected with our Bureau of Foreign Affairs, as in my profession I had occasional need of the information with which they alone could supply me.

'The details of Captain Brerliam's recent experiences were quickly in my possession. They were

briefly as follows:

'Monsieur le Capitaine had gone to Germany for the purpose of studying the language. He had the entrée to the best circles, and, in due course, met the beautiful young Countess von Erdenheim, with the result which might have been expected where there is beauty on the one side and so forceful and attractive a personality upon the other. The Countess was the ward of her brother, who bore a somewhat sinister reputation, and was known to entertain other views for her future. The Count challenged the young man, but the Captain refused to meet him on the ground that he did not intend to kill the Count or to be killed by him, as in either case his marriage with the lady would be rendered impossible. Ah, but how characteristic of his nation! You English make a definite future, to which you will sacrifice the present without flinching.

'Disappointed in his first attempt to rid himself of the unwelcome suitor, had the Count von Erdenheim engaged the services of a friend to dispose of the business? It was certainly singular that Captain Brerliam should have been called out again within a few days, the pretext being that Monsieur le Capitaine had trodden upon the toes of his adversary, a gentleman who had no apparent connection or even acquaintance with the Count. But on that point all who knew of the matter drew their own conclusions.

'Captain Brerliam, being unskilled with the rapier, and having choice of weapons, decided to fight with heavy American revolvers at ten paces. When he arrived at the spot appointed for the meeting he found no antagonist, who had, as it afterwards transpired, disappeared altogether from Berlin.

'I may inform you that it was at this point of the story that I formed an opinion which later proved of some value.

'Such an occurrence caused, as you may suppose, a very pretty scandal in Berlin, so that it was impossible for some days to enter any place of public resort without hearing from one direction or another a new and extraordinary version of this strange affair. As for Monsieur le Capitaine, he found his position in society intolerable, and consequently removed to Paris, where, a few days after his arrival, he was publicly insulted by Monsieur von Stulbach, so that he had no option but to challenge the fellow. Von Stulbach accepted a meeting, the weapons to be swords.

'On carefully reconsidering all these facts, I found myself more than ever persuaded that my first almost instinctive supposition must be the correct one.

'On the following morning Monsieur le Capitaine appeared for his lesson. Alas, monsieur! I found him impossible, absolutely impossible!

'I tried him with a little loose play. Ma foi! he was full of crude strength; but of what use is that, monsieur? You are aware that it not infrequently forms a serious hindrance to the improvement of a pupil. Finesse is of all things the most requisite, and that Captain Baerliam possessed not at all. He confined himself to the simple attack, lunging

furiously and eagerly, with the head carried well forward. Figure to yourself my despair!

"Well," said he, when we ceased for an interval, what do you think of my chance?"

'What could I say? It seemed to me hopeless. You know that a hot-tempered person rarely is a good fencer. I had had to do with many a fiery blood in my time, but never any to equal this black-haired Englishman.

"Monsieur must guard himself more assiduously," I said.

"It's for the other man to do that."

'Imagine this type of a man!

"But," I interposed, "it may be Monsieur von Stulbach who will achieve the attack."

"Eh, what's that? I don't know, of course; but I won't give him the chance if I can help it. For my part, I am better with the gloves than with these bodkins, as you have seen for yourself."

'All this troubled me more and more, for not only had I formed a sentiment of liking for my client, but also I had a reputation to maintain.

'I gave him some instructions, and we set-to a second time. I pitied him, monsieur. I pitied this fine young man. He attacked wildly, roughly, lunge upon lunge, three parts of his body uncovered and at the mercy of his enemy's blade. One could have pierced him in twenty places. He said that he had learnt somewhat of the art at your St Cyr, your military college—but how much? Just sufficient to be dangerous to himself!

'I reiterated my cautions, and urged him to engage with his intelligence as well as his rapier; but he persistently repeated:

"My only chance is to rush him. I have no science, I know, therefore show me how to rush him."

'Then he asked me if I had any information about Von Stulbach to give him.

'I replied that so far I had been unable to learn more than he already knew.

"Perhaps I should give you one other hint," said he. "Von Stulbach reminded me oddly of the man whose courage failed him at Berlin."

'This communication did not surprise me; I was, indeed, prepared for it. However, as soon as my duties permitted me, I sought out a friend of mine, who is au fait with all the gossip of all the cities of Europe. It was a cold, wet evening, and I congratulated myself on meeting Hallard as I approached the café which I knew he frequented. We entered amid the tinkle of glasses and that vivacious sound of conversation which is so conspicuously absent from the melancholy meals one partakes of in the restaurants of monsieur's native land.

'We chatted on casually for a time, though all the while I was leading up to my subject carefully. I was truly lucky on that occasion, for Hallard proved to have been an eye-witness of the quarrel between my Captain and M. von Stulbach. I begged him to describe what had taken place.

"That is easy," he replied, "since the affair

occurred precisely within these walls. The Englishman was seated alone when Von Stulbach arrived and placed himself at the adjacent table in that corner. Of a sudden there is a scramble, some loud words, a table is overthrown, and Von Stulbach has the Englishman's wine trickling down his face."

'I questioned Hallard, who, it seemed to me, was piquing my curiosity with a purpose—openly concealing, as it were, something more interesting, until he should have worked me up into that condition of eagerness to hear which renders it a peculiar pleasure to narrate.

"M. von Stulbach still comes here every even-

ing ?" I said. "Pray point him out."

"Ah, patience, my friend; he arrives a trifle later. He interests you?"

"Naturally. Persons concerned in affairs of honour are always objects of interest to one of my profession."

"Yes, yes; like the sharks one reads of in the

books of travel, you scent blood!"

'Hallard was still exulting over this piece of wit when a new arrival took his place at a short distance from us. He was a vigorous-looking man with a strong black beard.

"It is he," said Hallard softly. "As to the Englishman, he has no longer to live than the date of the meeting. It is said this Von Stulbach could give points to our first fencers here in Paris," and he

threw at me a glance of raillery.

'Upon this I turned and stared at Von Stulbach. He was seated sternly alone, his black beard within three inches of his long black glass of coffee. He glared at every one who approached the table with a forbidding aspect, and smoked slowly as a man who thinks. Presently he lifted his eyes and met mine fixed upon him. I did not remove my gaze. As for my conduct, monsieur must remember how much there was at stake. M. von Stulbach returned my glance rudely.

""You interest yourself peculiarly in me, monsieur," he said in his thick German-French.

"It is true," I replied politely.

'He rose and stood over me. "I permit to Stuttgart.

no one an impertinent curiosity in my affairs," he growled.

'I rose also. "Monsieur mistakes," I said.

'There had fallen a silence upon the assemblage, now there arose a laugh and an excited whispering. In those days, monsieur, I was not without a reputation.

"I make no mistakes," returned Von Stulbach slowly, overbearingly. "But perhaps monsieur has his own reasons for avoiding a meeting."

'The insolence of the sneer was intolerable.

"M. von Stulbach is the first who has insinuated as much," I answered, and I handed him my card.

'Another gentleman now joined our group with a bow, and said to the German:

"This," and he indicated me, "is M. Desterre, one of our most celebrated fencing-masters."

"What of that?" cried the other. "We of Stuttgart can hold our own"—— then he checked himself.

"Ah, so," returned the gentleman re-scating himself.

'From my elevation as I stood I looked round. Every eye was upon us. Some of those present sat with their hands arrested in the act to drink, and some smoked hurriedly.

'In the meantime Von Stulbach was engaged in studying my card. At last he turned to me haughtily:

"I need scarcely say that this matter can go no further between us."

"It is entirely owing to monsieur that it has gone so far," I answered.

'Von Stulbach, without taking any further notice of me, delivered a challenging look round the room, and stalked out.

'Upon his departure the tables fell on the instant into a babel of discussion. For my own part I was anxious to give myself up to consideration of this strange incident; therefore, eluding the desire of Hallard to detain me, I hurried to my house, and, after some deliberation, sent a telegram to an old pupil of my own who was at that time residing in Stuttgart.

THE AFRICAN GUANO ISLANDS.



State of development attained by the modern art of globe-trotting, and the comprehensive accomplishments of its numerous votaries, there still remain some spots on

our planet not the least charm of which lies in the fact of their being outside the ordinary highways of travel. Away in the South Atlantic, lying between latitude 28° S. and 24° S., quite out of the track of steamers and sailing vessels ploughing the ocean between England and the Cape of Good Hope, and fringing the shores of Great Namaqualand and German Damaraland, are a dozen islands, bleak, barren, and unpromising in themselves beyond description, and yet the natural depôt of one of the most fertilising agents known to commerce. Their names are Plum-pudding, Albatross, Sinclairs, Pomona, Long, Possession, Halifax, Seal, Penguin, Ichaboe, Mercury, and Hollamsbird Islands, the largest some three miles long by half-a-mile in breadth, and the smallest a mere islet of rock.

By an act of parliament passed in 1874, these islands, generally known as the Ichaboe group, were annexed to the Cape Colony, and for many years

were leased out to private individuals, who reaped a rich harvest as the reward of their enterprise. As the leases fell in, however, the colonial government undertook the business, the immediate management being delegated to an agent, who has hitherto been remunerated by a commission on the net yearly profits, amounting to 15 per cent. on the first £8000, 5 per cent. between £8000 and £15,000, and 3 per cent. between £15,000 and £20,000. For the last seven years the annual production has been about 2770 tons, and the cost of working is put down at £3, 5s. 7d. per ton, while the price at which guano is sold to the colonial farmers is at present £6, 10s. per ton. In England it fetches from £8 to £9; but prior to the manufacture of artificial fertilisers the market-price has been as high as £17 or £18 for first-class stuff. Each island, it should be observed, produces a different kind, or rather quality, depending more or less on the amount of sand and grit with which the guano becomes mixed; Mercury, for instance, which is nothing but a barren rock, furnishing the commodity in the most unsophisticated form, ammonia being a constituent part to the extent of no less than 19 per cent.

In consequence of certain alleged irregularities brought to light in the public prints, the government in July last resolved to appoint a commission to inquire exhaustively into the working and general administration of the islands; and, among other things, a surprise-visit was arranged, with a view to ascertaining on the spot the actual state of affairs. To this end a small steamer was chartered, and, with several officials on board, among whom was your correspondent, in the capacity of secretary, proceeded on a cruise of inspection, an opportunity being thus afforded of visiting what, to most people at all events, is a terra incognita.

The coastline of south-western Africa for a very considerable distance north of the Cape of Good Hope presents but few features of interest; indeed it may be described as a wearisome and monotonous picture of barren-looking rocks, alternating with long, arid stretches of sand-dunes, the desolation of the scene being completed by the angry surf which with ceaseless and depressing rhythm beats upon the shore. At the same time, the atmosphere in these comparatively rainless latitudes is singularly pure and invigorating; one feels as if it were almost a luxury to breathe; and when night closes in, the starry heavens present a glorious spectacle to the eye, while all around the vessel the sea flashes and sparkles with the phosphorescent rays emitted by countless forms of marine life.

Possession Island, the largest of the group, is about five hundred miles from Capetown, and viewed from a short distance off looks uncommonly like a huge drab-coloured clinker set down in midocean. It is crescent-shaped, and shelters Eliza-

beth Bay from the westward, the mainland being well defined in the distance. On nearer approach one experiences a sensation much akin to that induced by a theatrical transformation-scene, the forbidding and apparently untenanted waste being alive with birds enjoying to the full the immunity secured from predatory foes, and showing but little sign of timidity from outside intrusion. Thousands upon thousands of penguins line the shore, strutting about with great self-importance, and jealous, one might almost imagine, that Nature has not endowed them with the power of flight like their comrades, the malagas, a very handsome bird about the size of an ordinary goose, and with much the same plumage except that the head and neck are tinted with yellowish feathers. Enormous flocks of these malagas are to be seen in every direction, either standing in solid groups, covering a large extent of ground, or wheeling about in the air, now and then darting out seawards in quest of fish, upon which they pounce with unerring accuracy. Then there are various kinds of gulls, guillemots, and other sea-birds. In July and August is the breeding season, and it is not till later in the year that the islands are what is technically called 'in full bloom.' when the birds are more numerous than ever. Some of the habits of the penguin are very peculiar. Their nests consist of a hole scratched in the sand, or just a crevice in the rock, into which they drag a few stones, pieces of seaweed, or any rubbish available; and here they deposit two, or at the most three, eggs, the period of incubation lasting six weeks. When the young birds are hatched they very quickly take to the water. Shortly after the breeding season is concluded, the work of collecting the guano or excrement begins: and this on the larger islands furnishes employment for thirty or forty hands, the ranks being recruited from all sorts and conditions of men. even a broken-down barrister having been known to cast in his lot amidst these untoward surroundings. At the time of the visit of the commission there were over 2000 tons of guano stacked on this island in a large heap, representing a moneyvalue of close upon £15,000. At one time Possession Island must have been the haunt of innumerable quantities of seals, for the remains of these creatures are to be seen in all directions, abundantly confirming the statement of Captain Morrell, who, when describing his visit here many years since, said, 'I saw the effects of a pestilence or plague which had visited these inhabitants of the ocean with as much malignancy as the Asiatic cholera does the bipeds of the land. The whole island was literally covered with the carcasses of fur-seals, with their skins still on them. They appeared to have been dead about five years, and it was evident they had all met their fate about the same period. From the immense multitude of bones and carcasses, not less than half-a-million must have perished, either through some mysterious plague or disease, or from the effects of a sand-storm.

The accommodation on Possession Island for the men employed far surpasses that on any of the others, and consists of a substantial wood and iron building and store in close proximity to the beach, where a rough kind of jetty has been constructed to facilitate the shipment of guano. There is also a small cooperage where the watercasks are repaired. Not a drop of fresh water is to be found on any of the islands, and the conveyance of water from Capetown is consequently an important business. An attempt has been made to condense sea-water by solar heat, an apparatus something like a cucumber-frame being used for the purpose; but the birds frequently interfere with its successful manipulation.

On Possession, Halifax, and Ichaboe Islands headmen are stationed, whose duty it is to control the collection and shipment of the guano and generally supervise the working on these and the smaller neighbouring islands. None of them are men of any very great intelligence, but they manage to keep a log-book or diary, in which daily occurrences as well as the amount of labour performed are noted down. The stores and medicines are also under their charge. Under no circumstances is any liquor allowed on the islands, a severe privation to many of the men, who have sometimes been known to drink, with great gusto, paregoric, Friar's balsam, and other medicinal remedies containing alcohol.

Halifax Island is about thirty miles farther north, and within a very short distance of the German settlement at Angra Pequeña. There were five men here—the headman an Italian, and the others hailing from France, Sweden, St Helena, and Capetown respectively. The quarters are very poor; but the storeroom contained an ample supply of salt-beef, biscuits, meal, and other necessaries. The absence of fresh meat and vegetables is sorely felt, and at times leads to attacks of scurvy among the men. To a flagstaff, from which floats the Union Jack, an old, weather-beaten board is affixed, bearing the inscription: 'Halifax Island: taken possession of by Capt. C. C. Forsyth, of H.M.S. Valorous, May 7, 1866, in the name of Her Britannic Majesty Queen Victoria. God save the Queen.'

On Diaz Point, close by, is a rough wooden beacon; formerly there was a marble cross erected by the famous navigator, Bartholomew Diaz. The pedestal was in its place in 1825, but the whole of this interesting landmark has now disappeared.

Seal and Penguin Islands, both small in extent, lie just at the entrance to Angra Pequeña Bay, the latter being almost entirely the abode of the guillemet, a black bird with a patch of white feathers on the back, and about the size of a wild duck. At the time of my visit there was nobody on this island, but a small stock of provisions is kept in a wooden shanty for the benefit

of the men who come at intervals to collect the guano. Still farther to the north lies Ichaboe, an island composed of granite, slate, and quartz, a little less than a mile in circumference, and distant something over half-a-mile from the mainland. In former days large numbers of vessels anchored here to load the fertilising ordure, which once rose, it is said, to a height of seventyfive feet, the deposit probably of centuries. The island itself lies low, and is not at any point more than thirty feet high. It would be difficult to find in hazy weather were it not for a conspicuous spar placed at the southern end, and bearing an inscription rendered well-nigh illegible through time and atmospherical conditions: 'Notice.-This island of Ichaboe is this day taken possession of for and in the name of Her Britannic Majesty Queen Victoria; and is hereby declared a dependency of . . . (Signed) . . . Captain, H.M.S. Furious. June 21, 1861. All claims as to soil or territory in Ichaboe are to be made to His Excellency the Governor of the Cape of Good Hope. God save the Queen.' Many graves are to be seen here, one of them containing the remains of a Scotsman who for no less than thirty-nine years made the island his home. At another spot part of a skeleton is to be seen, the rocky nature of the ground not allowing of very effectual interment. In striking contrast with the silent home of the dead is the animation displayed by the feathered inhabitants, whose graceful movements and busy activity one might watch for hours without tiring.

After quitting Ichaboe, the coastline for some little distance assumes a bolder aspect, and Dolphin Head, the southern extremity of Spencer Bay, is a very prominent headland, a massive wall of rock rising abruptly and almost perpendicularly from the water's edge to 600 or 700 feet in height, against which the sea beats with great violence.

About a mile and a half from the mainland lies Mercury Island, a gigantic rock, conical in form, with a length north and south of about half-a-mile. The highest point is 160 feet above the sea-level, and from this eminence an extensive view is obtained, the general physical aspect not only of the island but of the contiguous continent being indicative of an extensive volcanic convulsion of nature at some remote period of the world's history. Here, again, life and death are significantly contrasted, one of the first objects that strike the eye on landing being the laconic epitaph painted on the smooth face of the rock: 'C. Abrahams, died 2d July 1890.' This island is of surpassing interest to lovers of Nature in her sterner mood; and many hours might be enjoyably spent in exploring its recesses, one of the principal points being an immense fissure or tunnel which bisects the rock, opening out at one place into a huge arched chamber, a hundred feet high or more, the sides of which have been carved and fashioned into

weird and fantastic shapes, while beneath seaanemones of lovely hues, and other singular marine specimens, fascinate the eye. The guano on Mercury lies in thick profusion in many parts, as it has not been collected for more than a twelvementh; indeed, a considerable quantity is being washed away by the sea, which in heavy weather submerges the low-lying portions. The accommodation is of the poorest and most meagre description, and fast going to decay; the marvel is how human beings can ever manage to exist in such a miserable hovel. Hollamsbird Island is seventy-five miles farther up the coast, and is the most isolated of the group, as it lies nine miles from the mainland. This also is the home of innumerable flocks of sea-birds; and as many

as fourteen hundred fur-seals have been captured at one time, the custom being to club them on the head. They are very easily frightened away from their haunts, and can even detect a steamer's smoke a long distance off. Sealing operations in these parts have been suspended for some time past.

In addition to the islands comprised in the Ichaboe group, there are some others nearer the Cape peninsula which go by the name of the Colonial Islands. Not only do they contribute largely to the guano supply, but a considerable revenue accrues also from the sale of penguin eggs, which are much appreciated, the privilege of collecting them being put up to tender annually by the government.

JOHN BURNET OF BARNS.

By John Buchan.

CHAPTER XXIX.-I WITNESS A VALIANT ENDING.



EY had scarce been five minutes gone when the full folly of my action dawned upon me. To be sure, I had saved the miller from death, but I had now put my own neck in the noose. I had given

them a clue to my whereabouts: more, I had brought the hunt down on lower Tweeddale which before had been left all but unmolested. It was war to the knife. I could look for no quarter, and my only chance lay in outstripping my pursuers. The dragoons dared not return immediately, for four unarmed soldiers would scarcely face two resolute men fully armed and strongly posted. They could only ride to Abington, and bring the whole hornets' nest down on my head.

Another reflection had been given to me by the sight of these men. In all likelihood Gilbert had now returned and resumed the chief command of the troop, for otherwise there would have been no meaning in the journey to Dawyck and lower Tweeddale which these fellows had taken. And now that my dear cousin had come back, I might look for action. There was now no more any question of foolish and sluggish soldiery to elude, but a man of experience and, as I knew well, of unmatched subtlety.

The miller was for thanking me on knees for my timely succour, but I cut him short. 'There is no time,' said I, 'for long thanks. You must take to the hills; and if you follow my advice you will hold over to the Westlands, where your friends are, and so keep the pursuit from Tweeddale, which little deserves it. As for myself, I will go up the Wormel, and hide among the scrogs of birk till evening. For the hills are too bare and the light too clear to travel by day.

To be kenspeckle in these times is a doubtful advantage.'

So, without more ado, I took myself off, crossed the fields with great caution, and going up a little glen in the side of the big hill, found a very secure hiding-place in the lee of a craig among a tangle of hazel-bushes. I had taken some food with me from the mill to provision me during my night journey, and now I used a little of it for my afternoon meal. In this place I lay all the pleasant hours after midday till I saw the shadows lengthen and the sun flaming to its setting over the back of Caerdon. Then the cool spring darkness came down on the earth, and I rose and shook myself and set out on my way.

I shall ever remember that long night walk over hill and dale to the Cor Water. The way was over the Wormel and the Logan Burn hills as far as Kingledoors. There I forded Tweed and struck over the low ridge to Talla Water. Thence the way was straight, and much the same as that which I had come with Marjory. But now I had no such dear escort, and I give my word that my limbs ached and my head swam oftentimes ere I reached my journey's end.

It was early dawning when I crossed the last ridge and entered the Cor Water valley. I found that, short as had been my absence, I had almost forgotten the entrance to the cave, and it was not without difficulty that I made out the narrow aperture in the slate-gray rock, and entered.

In the first chamber all was dark, which struck me with astonishment, since at five o'clock on a good spring day folk should be stirring. But all was still, and it was not till I had come into the second chamber, which, as I have told, was the largest in the place, that there were any signs of life. The faint struggling light was yet sufficient to see with, and by its aid I made out the old man who had spoken with me on that first night

of my journey.

He was sitting alone, staring before him as is the way with the blind; but at the sound of my steps he rose slowly to his feet. One could see that the natural acuteness of his hearing was little impaired by years. I paused at the threshold, and he stood listening; then he sank back in his seat as if convinced it was no enemy.

'Come in, John Burnet,' he said. 'I ken you weel. How have you fared since you left us? I trust you have placed the maid in safe keeping.'

I had heard before of that marvellous quickness of perception which they possess who have lost some other faculty; but I had never yet had illustration of it. So I was somewhat surprised, as I told him that all as yet was well, and that

my lady was in good hands.

'It is well,' said he; 'and, Master Burnet, I fear you have come back to a desolate lodging. As ye see, all are gone and only I am left. Yestreen word came that that had happened which we had long expected. There was once a man among us whom we cast out for evil living. He has proved the traitor, and there is no more safety here. They scattered last night, the puir, feckless folk, to do for themselves among the moors and mosses, and I am left here to wait for the coming of the enemy.'

'Do you hold your life so cheap,' I cried, 'that you would cast it away thus? I dare not suffer you to bide here. I would be a coward indeed

if I did not take care of you.'

A gleam of something like pleasure passed over his worn face. But he spoke gravely. 'No, you are too young and proud and hot in blood. You think that a strong arm and a stout heart can do all. But I have a work to do in which none can hinder me. My life is dear to me, and I would use it for the best. But you, too, are in danger here; the soldiers may come at any moment. If you go far to the back you'll find a narrow way up which you can crawl. It'll bring ye out on the backside of the hill. Keep it well in mind, lad, when the time comes. But now, sit ve down, and give us your crack. There's a heap o' things I want to speir at ye. And first, how is auld Veitch at Smitwood? I once kenned him weel, when he was a young 'prising lad; but now I hear he's sair fallen in years and gien ower to the pleasures of eating and drinking.

I told him all of the laird of Smitwood that I could remember.

'It would be bonny on the muirs o' Clyde in this weather. I havena been out o' doors for mony a day, but I would like fine to feel the hill-wind and the sun on my cheek. I was aye used wi' the open air,' and his voice had a note of sorrow.

To me it seemed a strange thing that in the

presence of the most deadly danger this man should be so easy and undisturbed. I confess that I myself had many misgivings and something almost approaching fear. There was no possibility of escape now, for though one made his way out of the cave when the soldiers came, there was little hiding on the bare hillside. This of course was what the old man meant when he bade me stay and refused to go out of doors. It was more than I could do to leave him, but yet I ever feared the very thought of dying like a rat in a hole. My forebodings of my death had always been of an open, windy place, with a drawn sword, and more than one man dead before me. It was with downcast eyes that I waited for the inevitable end, striving to commend my soul to God and repent of my past follies.

Suddenly some noise came to the quick ear of the old man, and he stood up quivering.

'John,' he cried, 'John, my lad, gang to the place I told ye. Ye'll find the hole where I said it was; and once there, ye needna fear.'

'Twas true I was afraid, but I had given no signs of fear, and he had little cause to speak of it. 'Nay,' I said haughtily, 'I will not move from your side. It were a dastardly thing to leave you, and the two of us together may account for some of the fiends. Besides, there is as much chance of life here as out on the braeside, where a man can be seen for miles.'

He gripped me fiercely by the arm so that I almost cried out for pain, and his voice came shrill and strange. 'Gang where I tell ye, ye puir fool. Is this a time for sinfu' pride o' honour or mettle? Ye know not what evil is coming upon these men. Gang quick, lest ye share it also.'

Something in his voice, in his eye, overcame me and I turned to obey him.

As I went he laid his hand on my head. 'The blessing o' man availeth little; but I pray God that He be ever near you and your house, and that ye may soon has a happy deliverance from all your afflictions. God bless and keep ye ever, and bring ye at the end to His ain place.'

With a heart beating wildly between excitement and sorrow, I found the narrow crevice, and crept upward till I came to the turning which led to the air. Here I might have safely hid for long, and I was just on the point of going back to the old man and forcing him to come with me to the same place of refuge, when I heard the sound of men.

From my vantage-ground I could see the whole cave clearly and well. I could hear the noise of soldiers fumbling about the entrance, and the voice of the informer telling the way. I could hear the feet stumbling along the passage, the clink of weapons, and muttered words of annoyance; and then, as I peered warily forth, I saw the band file into the cave where sat the old man

alone. It was as I expected: they were some twenty men of my cousin's company, strangers to me for the most. But what troubled my thoughts was that Gilbert was not with them.

'By God, they're off,' said the foremost, 'and nothing left but this auld dotterel. This is a puir haul. Look you here, you fellow,' turning to the guide, 'you are a liar and a scoundrel, and if your thick hide doesna taste the flat o' my sword ere ye're five hours aulder my name's no' Peter Moriston.—You (this to the old man), what's your name, brother well-beloved in the Lord?'

At their first coming he had risen to his feet and taken his stand in the middle of the cave, by the two great stone shafts which kept up the roof, for all the world like the pillars in some mighty temple. There he stood looking over their heads at something beyond, with a strange, almost pitying smile, which grew by degrees into

a frown of anger.

'Ye've come here to taunt me,' said he; 'but the Lord has prepared for you a speedy visitation. Puir fools, ye shall go down quick to the bottomless pit like Korah, Dathan, and Abiram, and none shall be left to tell the tale of you. Ye have led braw lives. Ye have robbed the widow and the fatherless, ye have slain by your numbers men ye darena have come near singly, ye have been the devil's own braw servants, and, lads, ye'll very soon get your wages. Ye have made thae bonny lands o' Tweedside fit to spew ye forth for your wickedness. And ye think that there is nae jealous God in heaven watching ower you and your doings, and biding His time to repay. But, lads, ye're wrang for once. The men ye thocht to take are by this time far from ye, and there is only one left, an auld feckless man that will no' bring muckle credit to ye. But God has ordained that ye shall never leave here, but mix your banes to a' time wi' the hillside stanes. God hae pity on your souls, ye that had nae pity on others in your lives.'

And, even as I watched, the end came sudden and awful. Stretching out his great arms, he caught the two stone shafts, and with one mighty effort pushed them asunder. I held my breath with horror. With a roar like a world falling, the roof came down, and the great hillside sank among a ruin of rock. I was blinded by dust even in my secure seat, and driven half-mad with terror and grief. I know not how I got to the air; but by God's good providence the passage where I lay was distinct from the cave, and a rift in the solid rock. As it was, I had to fight with falling splinters and choking dust all the way. At last-and it seemed ages-I felt free air and a glimmer of light; and with one fresh effort crawled out beneath a tuft of bracken.

And this is why at this day there is no cave at the Cor Water, nothing but the bare side of a hill strewn with stones.

When I gained breath to raise myself and look around, the sight was strange indeed. The vast cloud of dust was beginning to settle, and the whole desolation lay clear. I know not how to tell of it. It was like some battlefield of giants of old time. Great rocks lay scattered amid the beds of earth and shingle, and high up toward the brow of the hill one single bald scarp showed where the fall had ended.

A hundred yards away, by his horse's side, gazing with wild eyes at the scene, stood a dragoon, doubtless the one whom the ill-fated company had set for guard. I hastened toward him as fast as my weak knees would carry me, and I saw without surprise that he was the Dutchman, Jan Hamman, whom I had already met thrice before. He scarce was aware of my presence, but stood weeping with weakness and terror. I took him by the shoulder and shook him, until at last I had brought him back to his senses, and he knew me.

'Where are they gone?' and he pointed feebly with his finger to the downfall.

'To their own place,' I said shortly. 'But tell me one word: where is your captain, Gilbert Burnet, that he is not with you to-day?'

The man looked at me curiously.

'He is gone on another errand, down Tweed toward Peebles.'

Then I knew he was seeking for Marjory high and low, and would never rest till he found her.

'I will let you go,' said I to the man, 'that you may carry the tidings to the rest. Begone with you, quick. I am in no mood to look on such as you this day.'

The man turned and was riding off, when he stopped for one word, 'You think,' he said, 'that I am your enemy and your cousin's friend, and that I serve under the captain for his own sweet sake. I will tell you my tale. Three years ago this Captain Gilbert Burnet was in Leyden, and there also was I, a happy reputable man, prosperous and contented, with the prettiest sweetheart in all the town. Then came this man. I need not tell what he did. In a year he had won over the silly girl to his own desires, and I was a ruined man for evermore. I am a servant in his company who worked my fall. Remember then that the nearer I am to Gilbert Burnet the worse it will fare with him.' And he rode off still pale and shivering with terror.

I mused for some time with myself. Truly, thought I, Gilbert has his own troubles, and it will go hard with him if his own men turn against him. And I set it down in my mind that I would do my best to warn him of the schemes of the foreger. For, though it was my cousin's own ill-doing that had brought him to this, and my heart burned against him for his villainy, it was yet right that a kinsman should protect one of the house against the plots of a common soldier.

RABBITS AND RABBIT-WARRENS.



T what period rabbits were first introduced into the British Isles is a matter of speculation; but it appears almost certain that they were first brought over from Africa to Spain, from whence

they gradually spread throughout the whole of Southern and Western Europe, which, being temperate in climate, forms a fitting habitat for the Lepus cuniculus. In Northern Europe the rabbit appears to be almost, if not totally, unknown; probably not so much on account of the lowness of temperature as from dearth of food and the deep snows which for long periods cover what little there is to sustain life. Coney is another name for the rabbit; but the coney of Scripture, the eating of whose flesh the Mosaic law prohibited, was the Daman or Hyrax—a totally different animal.

But for the flesh of the rabbit, many of the poorer classes of people who live near the rabbitwarrens of East Anglia would come poorly off for animal food, the wages of the farm-labourers not being sufficient to provide butcher-meat for themselves and families except on rare occasions. To these poor agriculturists the rabbit, either floating in a sea of stew or more rarely baked with a mountain of potatoes, is a positive necessity, and is enjoyed by every member of the family; while the taste of a hare—the rabbit's big brother—is in most cases absolutely unknown. Indeed, the very fact of a hare being seen in a poor man's cottage would go far to stamp him as dishonest; for while the rabbit is regarded as peculiarly the poor man's food, until recently being classed among vermin, the hare is considered as game, and therefore fitting only for the table of the landlord or landowner.

Yet, from a naturalist's point of view, the hare and rabbit are of the same family, although there are striking points of difference between the two. A hare will weigh as much as three ordinary wild rabbits, and in the market is just about three times its value. A hare is contented with a shallow depression in a field (its 'form') for its residence; but the rabbit, with its energetic little feet, burrows out for itself a comfortable home, where it is safe from the inclemency of the weather, wind, and rain.

In the number of its progeny the rabbit is far ahead of the hare. Hares commence to breed when they are about twelve months old, and bring forth from two to five at a birth about four times a year; whilst the rabbit, commencing to breed at six months old, has from five to eight young ones five or six times during the season.

Young hares, however, have a distinct advantage over young rabbits, as they are born covered with hair and with their eyes wide open to all around them. The poor little 'bunnies,' on the other hand, come into the world both blind and naked. Hair soon begins to show itself on their smooth little bodies; but they do not receive their sight until ten or twelve days after birth.

As food, the flesh of the rabbit compares very favourably with that of the hare, being whiter, less dense in fibre, and therefore more easy of digestion, and of delicate flavour—qualities which render it almost equal to the flesh of poultry both for young children and invalid adults.

Rabbits are usually classed under four heads—namely, 'warreners,' 'parkers,' 'hedgehogs,' and 'sweethearts.'

The first kind, as the name implies, are in the habit of making their homes in burrows in open grounds or warrens; the 'hedgehogs' are found in banks surrounding fields, in woods, and places where the soil is not sufficiently light or sandy for them to form subterranean dwellings, and are distinguished from the 'warreners' by having less fur on their backs. The 'parker' lives and breeds on park-land or flat pasturage, and is indistinguishable from the last kind except to the expert eye of professional warreners. 'Sweethearts' is the generic name for the whole class of tame rabbits now multiplied into endless varieties in colour, form, and size. Some of this variety will weigh ten pounds-a weight which would be reckoned heavy even for a hare; but as there is in such cases more fat than flesh, they are not so profitable for the table as less gross animals.

The wild doe-rabbit makes an excellent mother, being most solicitous for the welfare of her progeny. The young are always produced in a separate burrow, which is lined with soft grass and made warm by the fluffy, soft fur which the mother plucks from her own body. When the young are born she regularly suckles them at night, going forth during the daylight to nibble the succulent grasses for her own sustenance. At such times she exercises great care for the safety of her young, pulling into the burrow a quantity of grass and earth, with which she makes a firm barrier to exclude all intruders and to ensure the warmth and comfort of her 'clutch.' It is said that this blocking of her especial burrow or nursery is to exclude the male rabbits, who at times are so fond of the young ones as to devour them. Probably when food is good and plentiful this would not occur; but when food is scarce and the weather cold or wet the buck turns cannibal, and sometimes eschews vegetable for animal food. It is not till the young have been under their mother's care for about a month that they are allowed to leave the burrow and nibble their way in the world, by which time the doe is getting ready to once more exercise the cares of maternity upon a second family.

What do rabbits eat? They will eat almost anything purely vegetable; but, as some foods are better for them than others, it is the warrener's care to provide them with the best diet. Grasses of various kinds come first in the rabbit's menu, and these must be of good quality-fine, succulent and juicy-if the flesh of the rabbit is meant for table; if for fur only, the quality of food is not of such vital importance. In bygone years, when land was too poor for arable purposes, it was allowed to run wild as feed for sheep; or, failing to sustain a paying number of sheep, and being too bad for any other purpose, it was turned into a rabbit-warren, where half-starved, diminutive rodents were allowed to breed and multiply as best they could for the farmer's benefit. In later days it has been found that rabbits are a paying 'crop,' and that the excellence of their flesh depends greatly upon the excellence of the pasture they feed upon. Rank or dry coarse grass produces coarse, stringy rabbits, small in size and tasteless in flavour; while good, sweet, nourishing, succulent herbage produces larger, healthier, and finer-flavoured rabbits, and actually more of them.

Now, suppose a modern warren to be covered with good pasturage, affording a fine run for rabbits; yet it must not be forgotten that year after year nourishment is being taken out of the soil which supplies that grass, and consequently the native nourishment of the earth will in time become exhausted, and the grass less luxuriant and nutritious. To avoid this, every care must be taken to rejuvenate and recharge the grass with the essential materials which the rabbits, by close cropping, are taking out of it. The flesh, bones, and blood of a rabbit contain over 50 per cent. of phosphate of lime, which is obtained from the grass and herbs consumed by it. The grass obtains this supply from the soil, and the soil in time becomes so poor in lime that the rabbits, although they eat the same quantity of grass as of yore, gradually diminish both in size and number. Ask a warrener why this is, and he will probably tell you the warren is 'rabbit sick;' and he is quite correct in his surmise. But go further, and ask him why this can be when there is plenty of pasture about? He will scratch his head and try vague excuses, but never realises the true answer. The fact is, he has been taking tons of phosphate of lime from the warren (unconsciously) in the form of rabbit-flesh, and has not put any back; consequently, the grass to the eye is as plentiful as ever, but it lacks that which goes to build up animal flesh, blood, and bone. The soil has become exhausted of its most requisite constituent -lime, and the owner's pocket suffers accordingly.

How can a warren be brought up to a normal state of nourishing efficiency and maintained so? In a very simple manner. On all land, except the warren, the steward or owner expects to be at some cost for tillage and labour; but in nine cases out of ten the poor warren is simply neglected by the husbandman, and looked upon as worthless, except that it raises a few rabbits, and no thought is ever given to its improvement. Let those who have warrens, either large or small, give them a little thought, and go to a little, only a little, expense over them, and they may double their stock of rabbits and increase their value, both as to skins and flesh.

Lime is cheap in almost every part of Great Britain; and after clearing the ground of all rubbish and detrimental weeds, the pasturage should be well spread with lime, broken small. This may be the ordinary lime; or if a gaswork be near, gas-lime will do just as well, although much cheaper, and may be had for about eighteenpence per ton. Rabbits have no aversion to gas-lime on account of its smell, for Mr Simpson, warrener to Lord Wharncliffe, has tried it with favourable results, and avers that rabbits will even make their burrows in it if placed in large heaps. He advocates its use very strongly, and recommends that it should be applied about October or November, after the rabbits have been marketed.

From two to four tons per acre may be applied, with the result that the soil will be replenished, the nourishing properties of the grass renewed, and the average weight of the rabbits increased several ounces all round; beside which, the improved health of the rabbits causes them to increase more rapidly, and thus add greatly in every way to the value of the warren.

Furze is a delight to rabbits, which devour the young shoots greedily, much to their benefit; for, although not generally known, furze is a most valuable rough food for both rabbits and other animals upon a farm. Contrast furze with two other foods of which animals are fond, and its value will at once be apparent. Swede turnips contain 1.94 per cent. of flesh-formers and 5.93 per cent. heat-producers; carrots, 0.60 and 10.18 per cent. respectively; while furze contains 3.21 per cent. of flesh-formers and 9.38 per cent. of heat-producers.

It will be found to pay the warren-owner to give children a trifle to gather acorns, of which rabbits are very fond, and on which they become quite fat. Probably the finest flavoured rabbits are those raised on warrens where juniper bushes are plentiful, for rodents of all kinds are very fond of the leaves of this tree; and rabbits which have a plentiful supply are highly prized by epicures because of the aroma and flavour imparted to their flesh.

A very good way of bringing grass to high condition is to plentifully sprinkle it with salt in the early spring, say at the end of March or beginning of April. Such a dressing will be found to make the grass eat short and tender to any grass-eating animals, whether cattle, deer, or rabbits, and is very beneficial for their health.

So fond are they of salt-strewn grass that they will forsake other parts of a pasture for a salted patch and will not leave it till it is bare of grass. Salt might be used with advantage to the extent of from one to three hundredweight per acre—the lesser quantity for warrens near the coast, and the larger when the warren is far inland.

Formerly rabbits were found on the roughest of rough ground; but now that the landowner begins to see that rabbits may be made to pay better than many other crops, his broad acres of pastureland are being in many places turned into profitable warrens. In our grandfathers' days, before the invention of wire-netting, warrens were so expensive to enclose that most of them were without boundaries of any kind, and consequently were at the mercy of poachers and rapacious birds and animals. When wire-netting was unknown, an owner wishing to enclose a warren had to have a fence built all round the area to be cut off from the rest of his estate, and this was both a long and expensive task. The fence was an embankment of earth usually about four feet high and three feet wide (or thick). It was faced with turf and capped with furze, which projected eight or ten inches beyond the face. This was usually carried out on the piecework system, and its cost must have been very considerable. Wirenetting has altered all this, both as to time occupied in enclosing a warren and the cost of so

A level country is unfitted for a warren, although very convenient for the plough; besides which, the rabbit does not delight in flat pastures, for he finds it very difficult to make his burrow in it, as all the sandy loam he digs out has to be dragged upward to the surface; whereas if he can set to work to form his home by excavating into the side of a hillock, bank, or sloping meadow, the acclivity affords him a ready vent for the loose soil, and his task is to send it downhill from the working, making his toil infinitely lighter and his home more weatherproof. A warren is, therefore, best made in broken, hillocky land, where some shelter is afforded it by trees or banks from any prevalent cold winds. Another reason why a warren should never be formed on flat land is the danger from rain: a sudden downpour results in the destruction of scores of young rabbits in such places, as the rain, finding a ready entrance to the burrows, rushes in and drowns them in their fur-lined nests.

The ground being selected, a row of rough posts about 3 or 4 inches in diameter and a little more than 5 feet long, are driven into the ground, from 3 to 4 feet apart, so as to form an unbroken line right round the ground. Next, wire-netting 18 inches wide and of 1½ inch mesh is fastened to the bottom of these posts in such a manner that 6 inches of it are turned down flat on the ground inwards. This leaves an upstanding barrier of netting a foot high.

Then another roll of netting 30 inches wide and of 11 inch mesh is fastened above this, so as to heighten the wall to an elevation of 3 feet, the remaining portion (6 inches) being turned down so as to form a flap hanging inwards also. This flap is strutted out from the posts by galvanised eyed-bolts about 7 inches long, through which an annealed wire is run all round the fence. This flap prevents rabbits from leaping out or foxes from leaping in. For the benefit of warren-owners, a wire-netting is now made, the bottom part of which is of small mesh and the upper of larger mesh; this saves much time in fixing. When necessary, the two edges of wirenet are laced together with tying wire. About 6 inches above the netting a thickly-studded barbed-wire should be fastened to the posts, so as to form a continuous guard all round the warren. Provision must be made for gateways where requisite.

On the stocking of a warren great differences of opinion exist, as much depends upon circumstances, such as the distance to market, the soil, the geographical position of the warren in the British Isles, whether reared principally for skins or flesh, and so on.

Take a small warren for example. One might start with about a score of rabbits to the acre, two-thirds of which should be does. These in one season will so stock a warren that by October three times that number may be killed, leaving an ample breeding stock for the next season.

Much judgment is required in estimating the number of rabbits a warren will sustain; but the state of the grass is usually a good criterion as to whether a warren is overstocked or understocked. In the latter case, the grass at a distance from the burrows will remain untouched, proving that many more might be reared on the same area of ground. In such a case, artificial burrows might be made so as to induce the rabbits to eat the untouched grass; fewer rabbits should be removed for market, so as to increase the breeding stock, or more rabbits introduced into the warren. With ordinary judgment it is seldom a warren is overstocked, the reverse being almost invariably the case.

The ordinary wild rabbit is very prolific, and finds a ready sale; but probably the best-paying kind is the 'silver gray,' whose skin is much sought after by the furrier.

The giant Belgian hare-rabbits have been tried on warrens, and thrive well; but although individually they are more than double the weight of the ordinary rabbit, yet it has been found that the weight of flesh taken from a warren of ordinary rabbits exceeds that from a Belgian warren when the aggregate weight per acre is taken into account.

Poor little bunny has many enemies, the principal of whom is the poacher, who plies his silent trade both in and out of season. Then

there is the fox; but fortunately Reynard requires something firm to leap upon when he enters a warren; and as the oscillating barbed-wire gives him no foothold, he usually cries 'Sour grapes,' and looks elsewhere for a meal. A fox, being an intelligent animal, looks out for gates whose tops

are free from shaking barbs; so be careful to arm your gates with the dreaded wire. Among the rabbit's minor but rapacious enemies are the cat, weasel, stoat, and even rats; and to these may be added owls, hawks, kites, and some say even rooks in hard times.

DAVID AND JONATHAN.

By 'TULLOCH ARD.'



HOSE two were simply inseparable.

Their friendship dated from the time when they toddled side by side in short frocks. Together they commenced their schooldays under Ian Martin's care. They

helped one another over the difficulties of twosyllabled words and simple addition. When they reached that bugbear of schoolboys, the fifth proposition in Euclid, they loyally held out to one another a helping hand, and together crossed the 'Bridge' in triumph. In the snowball fights between their school and the General Assembly's, they were invariably side by side in the forefront of the battle. On one of these occasions Davie Forbes challenged the champion of the opposing school to fight for the honour of his side. The challenge was eagerly accepted, and a desperate combat ensued, both schools looking breathlessly on. Davie barely reached his antagonist's chin, and his pluck was of small avail against the strength of the other. A well-directed blow on his nose stretched him bleeding in the snow. The victor's triumph was short-lived, for before he had time to receive the congratulations of his friends, Johnny Matheson was on him like a young lion to avenge his friend. Taken by surprise, the champion made a weak defence, and, before he had time to recover his guard, he was contemplating the sky with all the fight taken out of him. Amid the cheers of their friends, the two chums modestly retired into the ranks, their discomfited foe meanwhile breathing dire vengeance when he could catch either of them alone. They became the popular heroes of their school, and thenceforward no one had the temerity to meddle with one when the other was standing by.

Their schooldays ended (they both left the same day), they determined not to be parted if they could help it. 'As sure as death, Johnny,' said Davie Forbes, 'I'll stick to you if you'll stick to me. If my father sends me to Edinburgh and yours keeps you here, we'll'—

'I know, Davie; we'll run away to sea.'
And they shook hands over the compact.

But their fathers had, with a fortunate unanimity of purpose, both decided on the same career for their sons. The two boys were to go to Edinburgh to study medicine. Herrington has yielded a crop of doctors and ministers altogether out of proportion to the size of the place.

Forbes senior and Matheson senior were not above the considerations of filthy lucre; and although neither would have objected to see his son 'wagging his head' in a pulpit, they feared the clerical market was getting overstocked, and the risk of their sons being 'P.P.s' (permanent probationers) had to be taken into account.

'It's a grand profession, is the medical,' said Forbes senior to Matheson senior. 'There's not another like it—except one, of course.'

'Except one, of course,' agreed Matheson senior.
'But I'm thinking Herrington is not the place for a doctor to make money. For the last thought in the mind of a doctor here is to make a good living out of his patients. It's philanthropists the doctors here have been, and that's a fact.'

'Well, our lads will have to try farther south. Perhaps when they have made experiments on the Sassenachs, and made money out of them, they'll come home to their own people to spend the rest of their days in the old town.'

Together the chums travelled to the Scottish seat of learning, full of the high hopes and aspirations which every Highland lad feels within him on leaving his native heath for the capital. They shared rooms as a matter of course, and passed through the varied experiences of life in city 'diggings.' They met the landlady with the useful cat, whose delinquencies furnished a text for its mistress, upon which she expatiated with all the eloquence of an ill-used martyr. But they were not so innocent, these Highland youths, to be taken in by her excuses.

'Mrs Thomson,' said Davie one day, 'your cat is too expensive a luxury for us. Its tastes are both nice and many. It has now got to do one of two things: feed like an ordinary cat or come to an untimely end. You understand?' And Mrs Thomson understood.

Another of their landladies, who had a large family, all of them fond of a good cup of tea, was in the habit of serving that beverage to her lodgers in an enormous teapot, upon the contents of which the two young men, healthy and normally thirsty although they were, could make but a comparatively small impression. Their tea bill assumed alarming proportions.

They protested against the too generous supply of the beverage for their modest requirements. But it was of no avail.

'You surely dinna expect the tea to confuse properly in a wee bit pot?' asked Mrs Tosh scornfully. 'You maun gie it room, ye ken.'

'I'll stop this, Davie,' said Johnny Matheson one morning, after they had satisfied their wants, and left the usual quantity of excellent tea; and so saying, he emptied the contents of the salt-cellar into the pot.

In the evening Johnny said significantly: 'I'm thinking, Mrs Tosh, the tea got too much "confused" this morning. The fact is, the pot is too big.' Mrs Tosh's face wore a grim look, but she said nothing. However, the huge pot

never again made its appearance.

The chums kept changing until they found 'diggings' and a landlady to suit them. Mrs Macpherson was a Highland widow in reduced circumstances, whose heart warmed towards her Highland lodgers. An occasional Gaelic phrase exchanged between them acted like a charm, and served as a talisman against imposition. For Mrs Macpherson was not proof against making a little out of mere 'Sassenachs, but her soul rose in revolt against the bare idea of 'doing' a fellow-Celt. She took a motherly interest in the lads. She darned their socks, sewed on their buttons, and evinced a touching solicitude for their comfort in all respects.

When the summer vacation arrived, where should the youths spend their holidays but in their beloved Herrington? They travelled by the delightful West Coast route. The Claymore called at many quaint townships snugly nestling in quiet bays, with the giant hills towering majestically above them. Ah! those glorious Highland hills! Who with a spark of the Divine in his soul can help feeling impressed by their grandeur? The littlenesses of human nature shrink abashed before them. They reveal the secret of the Highlander's insight, his spirituality, his romance, his poetry. How could a people living under the shadow of such majesty, daily learning from these Books of Nature, be sordid, or mean, or commonplace? But the spell is broken by the realisation that a grinding poverty has, by a gradual process, been crushing the finer feelings out of these hill-dwellers; and increasing contact with the cold materialism of the world is doing the rest.

The steamer was full of southern tourists, many of whom had never been farther north than Rothesay, and they affected a fine contempt for everything and every one Highland. In their view, civilisation came to a dead stop at Oban, and beyond lay a region of semi-barbarism and partially-clothed barbarians. In their sublime ignorance they looked down on Highlanders from their lofty standpoint with a condescension which, if they had only known it, was ludicrously misapplied. Two of these superior individuals, dressed

in loud checks, were speculating as to what kind of place Herrington, and what manner of people the Herringtonians, might be. Their mental horizon was bounded by the four walls of a warehouse in Buchanan Street or Cheapside, and they applied everything Highland—the hills included—to the commercial touchstone.

'It wouldn't take much to buy up this place,' they would say, contemplating one of the small townships; 'sixpence three-farthings a mile, or a hundred pounds for the whole bag of tricks, and

dear at the money too.'

'Let's take a rise out of these cads,' whispered Johnny Matheson to his friend, as the steamer was crossing the Minch, and forthwith they proceeded to draw a terrible picture of their native place and its inhabitants. 'Desperate characters-unsafe to venture out at night without a revolver-a deadly enmity towards everything in trousers, especially if the trousers are of a loud pattern.' Such were a few of the pleasant fictions with which they entertained the tourists, who began to feel an uncomfortable sensation, which they attributed to the vicious waves of the Minch, as these made the Claymore feel lively. It may, however, have been what is generally termed 'funk.' how, it is on record that the loud-checked ones returned from Herrington unscathed, but sadder and distinctly wiser men.

David and Jonathan, by which names the two medicals became known, had 'a real good time' in Herrington. They were general favourites, and every house was open to them. Fishing, sailing, and shooting galore were the order of the day. But a cloud was about to settle on the horizon of their

enjoyment.

One day, when trout fishing, Davie seemed strangely preoccupied. He cast wildly and never got as much as a rise. His companion, too, made a poor show.

'Hang it all, Davie,' he said, 'I'm not a bit of use to-day; and as for you, you'll never get a rise if you continue to cast in that fashion.'

'Johnny,' was the solemn reply, 'I am going to tell you something. Don't you think Mary Campbell is a fine girl?'

Johnny started. 'You're right there, my boy. But—but what has that got to do with what you were going to tell me?' And he laughed nervously.

'Well, it's just this. I'm clean head over ears in love with her, and you're the only one that knows it. Now she's very friendly with you (Johnny winced), and I want you to—to put in a good word for me when you get the chance. You'll do that for me, won't you?'

Johnny Matheson was silent for a moment, and then he replied very slowly:

'I'll do anything I can for you, David (he had never called him 'David' before); I promise you that' And the two shook hands.

'You're looking very pale, Johnny,' said Davie

Forbes as they trudged homewards with their empty baskets over their shoulders.

Mary Campbell was indeed 'a fine girl' as Davie Forbes had said. She was straight and lissome, and two bonny blue eyes looked now mischievously, now demurely, over a straight nose, a well-shaped mouth, and cheeks like rowans. She had been the cause of many sighs and heartaches, for she was provokingly impartial in her favours. 'Miss Crissie's' old housekeeper, Jessie—that shrewd observer of human nature—had on more than one occasion given her views about Miss Mary Campbell.

'She's as purty a lassic as ever walked,' she would say. 'But she's chust like the rest of them. They know how the lads run after a purty face, and they don't make themselves too cheap. But it's a good heart Miss Mary has got, as well as a bonny face, and it's me that's thinking there's a soft spot in it for some one. Oh no—it's me that's not going to say his name. But I'll be knowing it all the same.'

Some weeks after the confession of Davie Forbes to his friend, they were out together at an evening party—the last before their return to Edinburgh.

'Parties' are a mild form of excitement in Herrington which are extremely popular among those by whom dancing is tabooed. As a rule they are characterised by decorous, depressing dullness, occasionally relieved by flashes of merriment. Cards are not permissible, but a harmless substitute is found in 'word-making' and similarly intellectual exercises. And really good singing is to be heard at these parties, for the air of Herrington appears to affect beneficially the elasticity of the vocal cords. Davie Forbes was easily first at the game of 'word-making,' and elicited an approving smile at his triumph from Mary Campbell, who was looking her best in a new dress specially made for the occasion. The other girls looked dowdy beside her; they saw with envious eyes that she was as easily first in the game of heart-breaking as was Davie Forbes in the art of 'word-making.' Curiously enough, 'Jonathan' proved a regular duffer at the latter exercise; but a careful observer could see that he overdid the cudgelling of a normally fertile brain, and that he seemed desirous of acting as a foil to the brilliancy of his friend. Both, too, were known to be possessors of fine baritone voices; but whereas David' sang with fine effect and thrilling expression the old ballad 'Mary' ('Kind, kind, and gentle is she'), 'Jonathan' gave a very lugubrious rendering of 'Thou art gone from my gaze, like a beautiful dream.' A hardly perceptible tremor was in his voice as he concluded.

'You're not in very good voice to-night, Mr Matheson (it used to be 'Johnny' when they were boy and girl); perhaps you are affected by the thought of leaving Herrington again so soon.' And Mary Campbell laughed nervously. 'I dare say that's it, Miss Campbell (it used to be 'Mary'). The fact is, Davie and I have had such a good time in the old town that neither of us likes the idea of going back to work. A holiday makes one so dreadfully lazy although it is supposed to have the opposite effect.'

'I suppose you will think and talk of us in this remote corner when you are together in your "diggings." Isn't that the correct name?'

'We shall often think and talk of you'—with a quite unnecessary emphasis on the last word—he answered gravely.

'I have never known such close friends as you two. I should imagine now, either of you would be capable of making a great sacrifice for the other, if required?' She looked at him demurely.

'Perhaps— But there is that pompous old ass, Fearsome, going to treat us to a bad quarter of an hour from "Israel in Egypt." He thinks it is "classical" to sing oratorio music, and he is very proud of his runs.'

But he was secretly pleased at the interruption. When the party broke up, the pairing of the younger people was the signal for feats of diplomacy which an ambassador might have envied.

'We go the same way, don't we, Mr Matheson?' and a pair of blue eyes shot fire into 'Jonathan's' heart, as he replied lamely:

'It is my misfortune to—to have to go the other way to-night, Miss Campbell. But,' he added eagerly, 'my friend Davie goes your way.'

'Friend Davie' was not far away, and anxiously offered his escort, which was accepted without enthusiasm. But here the voice of the hostess intervened with a request for 'Mr Forbes to see Miss Skimp home, and perhaps Mr Matheson wouldn't mind escorting Miss Campbell.' Miss Skimp was a spinster of fifty summers, who gushed her thanks and forthwith confided her angular frame into the safe keeping of the disgusted Davie. And so Johnny Matheson had to see Mary Campbell home after all. That young lady determined to have her revenge on her apparently unwilling escort.

'I can assure you, Mr Matheson,' she said in her most freezing tones as they trudged along the deserted and moonlit street, 'it pains me beyond expression to take you out of your way on my account. I fully appreciate the sacrifice.'

'For Heaven's sake, Ma—Miss Campbell, don't —please don't.' He pulled himself up with an effort.

'I fancy,' she continued mercilessly, 'I fancy that the escort whom you had so kindly provided for me would have found my company a little less burdensome.'

'I am quite sure he would,' he replied eagerly.
'I mean—I mean—he is a far more worthy escort than I. Miss Campbell,' he went on, 'if you only knew what a fine fellow Davie is, how clever he is, how good-hearted he is—you would—you would—well, you would admire him immensely.'

'And who told you, pray, that I don't admire

He looked at her—the blue eyes were laughing mischievously.

'Yes—yes—but you would admire him tremendously. In fact, if you really knew him as I know him, you couldn't help loving him.'

'Indeed—no doubt. But I am not aware that I want to know him so well as to admire him tremendously, and as for loving him—well—but it is really too funny.' And she laughed outright.

'Why do you laugh?'

'An idea struck me. Have you ever been tickled by an idea?'

'No, my ideas never tickle, they bite.'

'Then, pray don't have any until you have seen me safely home. You might have an attack of hydrophobia, or should it be ideaphobia?' The merry laugh chilled him.

'Are you fond of poetry, Mr Matheson?' she

asked as they were parting.

'No, not particularly. But why do you ask?'

Because I want to make you a present of a Longfellow. He is delightfully simple, so I like him. I dislike equally men and books that are enigmas. But I must now bid you good-night with my best thanks for your act of self-sacrifice.' As the door closed he caught a glint of her eyes brimming with laughter.

It was not until they were back under Mrs Macpherson's homely roof in Edinburgh that he opened her parcel and looked at the copy of Longfellow which she had sent him. He found a book-marker inside. The place which it marked was 'The Courtship of Miles Standish.'

That was all. But it was enough. The joy which filled his heart struggled with pity for his friend. 'Poor Davie' was all he said—'poor Davie.'

The story had to be told. It was a bitter pill for Davie, but he bore it manfully. 'You've won her fairly, Johnny,' he said as he wrung his friend's hand. 'Everything that a friend could do you have done. But you were meant for one another. You're a lucky fellow in winning such a girl, and I am a lucky fellow in possessing such a friend.'

They heard from Herrington that Mr Fearsome of oratorio fame was pressing his suit most persistently on Mary Campbell. He was rich, but Johnny Matheson was now assured that riches and a love of Haudel combined could make no impression on the heart he had won in spite of himself.

'I have a good mind,' said Mary Campbell to him when at last they met again—'I have a good mind to make you learn "Miles Standish" off by heart as a punishment for being such a bashful lover. Only I knew all the time how matters stood—leave that to a woman's insight—and it made me love you all the more. As for me,' she

added demurely, 'I have been reading Goldsmith lately. "She Stoops to Conquer" has a peculiar fascination for me. But beware of ever attempting to presume on that, sir.'

Johnny's reply need not, for the purposes of

this story, be recorded.

As for the two friends, they are likely to remain David and Jonathan to the end of the chapter.

THE POET.

Who is the Poet? Who?—How dare define
The mystic art divine—
The matchless power that flings
A touch of magic o'er Life's meanest things—
The subtle Syren who so sweetly sings
To sailors on Life's main
That soul and sense alike surrender to the strain?

Not he, with noble aims and ideals born,

Who meanly dares to scorn

High thoughts and themes sublime;

Who feeds the vulgar ear with vulgar rhyme,

Fitting the fashion of the fickle time;

And Poesy's fair flower
Would make subservient to Ambition's pride of power.

Not he consumed with sensual passion's fire,

Though on his wanton lyre

A willing world hath hung,

What time with blistered lips of love he sung,

Dropping the cadence of his cancerous tongue;

His heart a hell contains,

And where a God should rule a grinning Satyr reigns.

Not these! The Poet sojourns not with such!

His sympathetic touch

Loves human smiles and tears;

He feels Creation's pulse—Earth's hopes and fears,

And all that Life endangers, Life endears,

Are his; on spirit-wings Uplifted, he discorns the Infinite in things!

Yet, with his best endeavours, still his best
Is ever unexpressed;
He never can impart
Half the bright jewels from his brain that start;
The highest art must still conceal its art,
Or just a hint suggest
That intimates the whole, or half-implies the rest.

The moon's soft are its silver circle tells;

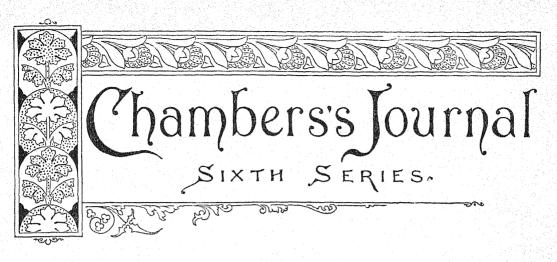
Within the ovum dwells

The Laureate-Lark enshrined;
In the hard flint the prisoned fire you find;
The self-same Hand the blushing rose designed

As moves this mighty world;
And all the planet laws are in each dewdrop pearled.

All the imperial sheen of purple dyes
In the low murex lies;
The best eludes our ken,
The sweetest thoughts escape the Poet's pen.
E'en in the hour of seeming triumph, when
The air with praise is rent,
He softly sighs and feels a noble discontent.

J. Hudson,



FORTUITOUS DISCOVERY.



HE accepted principle of necessity being the mother of invention is, like many another maxim, misleading, and would be more accurately rendered by substituting for invention the word contrivance or device.

The true meaning of the Latin invenire is to come or stumble upon by chance, and in this sense accident alone can claim legal parentage over any fortuitous discovery. Many things of the greatest service to the world in general owe their origin entirely to chance. The rubbing of a piece of amber 'evoked,' to use Faraday's words, 'an invisible agent which has done for mankind far more wonderful things than the genie of Aladdin did or could have done for him;' the up-forcing of the lid of a cooking vessel discovered the marvellous power of steam, and the falling of an apple from its parent stem demonstrated the law of natural attraction. The simple swinging to and fro of a suspended lamp gave birth to the application of the pendulum, to which the precision of modern astronomy owes so much; while the finding of the natural magnet loadstone 'did more, said the grave philosopher John Locke, 'for the supplying and increase of social commodities than those who built workhouses."

The manufacture of gunpowder, according to Sainte Foix, was thus revealed. An Augustinian monk, Berthold Schwartz, having put a composition of sulphur and saltpetre in a mortar, it took fire, and the stone that covered it was blown off with great violence, which accident led the chemist to think it might be used to much advantage in attacking fortified places. He accordingly added to it a quantity of charcoal to render it more apt to take fire and increase combustion.

Leaden shot are attributed to a Bristol plumber, who, one night about the year 1783, 'had a dream which was not all a dream' that he was out in a shower of molten lead, which fell in the form of spherical drops. His curiosity being aroused, he went next day to the top of a church and poured some melted lead into a vessel

of water lying below. To his great delight, he found that the lead had gathered into beautifully-formed globular balls, and he at once took out a patent.

The inference that glass was discovered by accident is strengthened by the fact that it is scarcely possible to excite a fire to sufficient heat for metallurgical operations without vitrifying parts of the bricks or stones of the furnace.

A Nuremberg glasscutter happened to let some aquafortis fall upon his spectacles, and noticed that the glass was corroded and softened where the acid had touched it. Taking the hint, he made a liquid, then drew some figures upon a piece of glass, covered them with varnish, applied his corroding fluid, and cut away the glass round his drawing. When he removed the varnish the figures appeared raised upon a dark ground; and etching upon glass was added to the ornamental arts.

According to common report, mezzotinto engraving was suggested by a soldier being observed one morning to rub off the barrel of his musket the rust it had contracted from exposure to the previous night's dew. The observer-whether Prince Rupert or not is one of the doubts of history-perceived on examination that the dew had left on the surface of the steel a number of very minute holes, giving the appearance of a dark engraving, part of which had been here and there already rubbed away by the soldier. He therefore conceived the idea that it would be practicable to find a way of covering a plate of copper with little holes, which, being inked and laid upon paper, would undoubtedly produce a black impression; while, by scraping away in different degrees such parts of the surface as might be required, the paper would be left white where there were no holes. Pursuing this thought, after various experiments, he invented a kind of steel roller covered with teeth, which, being pressed against the copper plate, indented it in the desired manner. The roughness thus occasioned had only to be scraped down where necessary in order to produce any gradation of shade.

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MAY 14, 1898.

One day nearly three hundred years ago, a poor optician was working in his shop in the town of Middelburg, in the Netherlands, his children helping him or amusing themselves with the tools and objects lying about, when suddenly his little girl exclaimed: 'Oh papa, see how near the steeple comes!'

Anxious to learn the cause of the child's amazement, he turned towards her, and saw that she was looking through two lenses, one held close to her eye, the other at arm's length; and calling her to his side, he noticed that the eye lens was planoconcave, while the other was plano-convex. Taking the two glasses, he repeated his daughter's experiment, and soon discovered that she had chanced to hold the lenses apart at the proper focus, thus producing the wonderful effect that she observed. His quick wit saw in this a wonderful discovery, and he at once set about making use of his new knowledge of lenses. Ere long he had fashioned a tube of pasteboard, in which he set the glasses at their proper focus, and so the telescope was invented.

The following year, 1609, Galileo, while in Venice, heard of the discovery; and, being greatly struck with the importance of such an instrument, soon discovered the principle of lenses in a shifting tube, and made a telescope for his own use. To having been the first astronomer in whose hands so valuable a gift was placed, Galileo owed both his reputation and persecution.

Among the many traditions concerning William Lee and the stocking-frame is one that he was expelled from the university for marrying, and that, being very poor, his wife was obliged to contribute towards the housekeeping by knitting. It was while watching the motion of her fingers that he conceived how to imitate those movements by a machine.

Arkwright accidentally derived the idea of spinning by rollers from seeing a red-hot bar elongated by being passed between two rollers.

The ordinary practice of taking a bath solved for Archimedes the question of how to test the purity of the gold in Hiero's crown. He observed that when he stepped into a full bath the quantity of water which overflowed was equal to the bulk of his body, and it occurred to him that the worth of the crown might be tested by such means. He thereupon made two masses of the same weight as the crown, one of gold, the other of silver, and immersed them separately in a vessel filled to the brim, measuring exactly the quantity of water that overflowed in each case. Having found by this means what measure of the fluid answered to the quantity of each metal, less in the case of the gold than of the silver-the bulk of the former being less, weight for weight-he next immersed the crown itself, and found that it caused more water to overflow than the gold, but less than the silver. Having found the difference between the two masses of pure gold and silver, in certain known proportions, he was able to compute the real quantity of each metal in the crown, and thus discovered the fraud that had been practised on the king, to whom he hurried, exclaiming, 'Eureka! Eureka!' ('I have found it! I have found it!'), an exclamation that has ever since been used to express exultation over a discovery.

Coming down now to our own time, the account of the discovery of saccharine, one of the numerous by-products of the gas-maker's refuse, whose sweetness is three hundred times more intense than that of cane-sugar, reads almost like a remarks

Dr Fahlberg had entered the Johns Hopkins University in America in order to devote himself exclusively to a study of the chemistry of coal-tar derivatives. Some months had passed, when one evening at tea-time he detected an intensely sweet flavour upon his bread and butter. He traced the sweetness to his fingers, to his hands, and to his coat-sleeves; and it dawned upon him that it must have been derived from one of the new compounds which he had that day succeeded in producing. He promptly returned to his laboratory and tasted the contents of every vessel with which he had been working. His idea was correct. One of his beakers contained the sweet material.

Those who are conversant with the fascinating philosophy of Bishop Berkeley may remember the following passage in his *Siris*, which, read by the light of present knowledge and the imposing list of valuable substances—oils, dyes, perfumes, flavourings, febrifuges, &c.—now obtained in the process of coal-tar distillation, is almost prophetic: 'The virtues of tar-water flowing, like the Nile, from a secret and occult source, brancheth into innumerable channels, conveying health and relief wherever it is applied.'

Professor Röntgen came upon his marvellous X-rays—which have opened out new fields of research in physical science, besides being of far-reaching practical utility in surgery and other departments—quite by chance. He was experimenting in the dark with a Crookes vacuum tube, which was covered with some sort of cloth. A strong electric current was passed through it, while close by was some prepared photographic paper, but no camera. Next day he noticed several lines on this paper for which he could not account. By restoring everything to exactly the same condition as on the preceding day, he was able to ascertain the real origin of these mysterious marks. It is curious that Shakespeare should have written in Hamlet:

Sit you down; you shall not budge;
You go not, till I set you up a glass
Where you may see the inmost part of you.

Act III. Sc.

There is a pathetic story, perhaps not generally known, concerning one who anticipated Daguerre,

Fox Talbot, and all other experimenters in solving the problem of fixing the fleeting image of the camera. While half the Academy of Sciences in Paris were struggling with the difficulty, a poorly-clad, half-famished-looking lad left a plate at the shop of Chevalier, the optician, on the Quai de l'Horloge, which proved that he had succeeded where all others had failed. He promised to return next day and show how the victory had been obtained. But from that hour to this he was never seen. Probably he fell sick and was buried in a pauper's grave, and the world will never know the name of the first professor of sun-picturing, or the details of its earliest romance.

'I was singing,' says Mr Edison, 'to the mouthpiece of a telephone, when the vibration of the voice sent the fine steel point into my finger. That set me thinking. If I could record the actions of the point and send the point over the same surface afterwards, I saw no reason why the thing should not talk. I tried the experiment first on a strip of telegraph paper, and found that the point made an alphabet. I shouted the words "Halloa! halloa!" into the mouthpiece, ran the paper back over the steel point, and heard a faint "Halloa! halloa!" in return. I determined to make a machine that would work accurately, and gave my assistants instructions, telling them what I had discovered. They laughed at me. That's the whole story. The phonograph is the result of the pricking of a finger.'

Though the examples here given by no means exhaust the roll of accidental revelation, they suffice to show that invention—to use the word in its now generally accepted sense—must be preceded by discovery, in the same way as production is a sine qual non of manufacture. In each case nature provides the material, leaving the execution to the genius, art, and subtlety of man.

JOHN BURNET OF BARNS.

CHAPTER XXX.-I RUN A NARROW ESCAPE FOR MY LIFE.



HIS was in April, and now the summer began to grow over the land. The days grew longer and the air more mild, the flowers came out on the hills—little mountain pansies and eyebright and whortle-

berry and the first early bells of the heath; the birds reared their young, and the air was all filled with the cries of them; and in the streams the trout grew full-fleshed and strong.

And all through these days I lay close hid in the wilds, now in one place, now in another, never wandering far from Tweeddale. My first hiding was in a narrow glen at the head of the Polmood Burn, in a place called Glenburn. It was dark and lonesome; but at first the pursuit was hot after me, and I had no choice in the matter. I lived ill on the fish of the burn and the eggs of wild-fowl, with what meal I got from a shepherd's house at the burn-foot. These were days of great contemplation, of long hours spent on my back in the little glen of heather, looking up to the summer sky and watching the great clouds fleeting athwart it. No sound came to disturb me. I had few cares to vex me; it was like that highest state of being which Plotinus spoke of, when one is cumbered not with the toils of living.

In this place I abode till near the middle of the month of June. Twice I had gone to the cairn on Caerdon and left a letter, which I wrote with vast difficulty on fragments of paper which I had brought with me, and received in turn Marjory's news. She was well and in cheerful spirits, though always longing for my return. The days passed easily in Smitwood; and as none came there, she was the better hidden. I wrote my answers to these letters with great delight of mind, albeit much hardship. The ink in the inkhorn which I had always carried with me soon became dry, and my pen, which I shaped from a curlew's feather, was never of the best. Then after the writing came the long journey, crouching in thickets, creeping timorously across the open spaces, running for dear life down the hill-slopes, until I came at length to the cairn on Caerdon, and hid the letter 'neath the gray stones.

But about mid-June I bethought me that I had stayed long enough in that lonely place, and resolved to move my camp. For one thing, I wished to get nearer Barns, that I might be within reach of my house for such provisions as I required. Also, there were signs that the place was no longer safe. Several times of late I had heard the voice of soldiers on the moors above my hiding, and at any moment a chance dragoon might stray down the ravine. So, late one evening about midsummer, I bade adieu to the dark Glenburn, and took off across the wild hills to the lower vale of Tweed.

The place I chose was just at the back of Scrape, between that mountain and a wild height called the Pyke-stone Hill. It was a stretch of moss-hags and rough heather, dry as tinder at this time, but, as I well knew, in late autumn and winter a treacherous flow. Thither I had been wont to go to the duck-shooting in the months of November and February, when great flocks of mallard and teal settled among the pools. Then one has to look well to his feet, for if he press on eager and unthinking he is like to find himself up

to the armpits. But if he know the way of the thing, and walk only on the tufted rushes and strips of black peat, he may take the finest sport that I know of. Here, then, I came, for the place was high and lonesome, and with a few paces I could come to the top of the Little Scrape and see the whole vale of Tweed from Drummelzier to Neidpath. I had the less fear of capture, for the place was almost impassable for horses; also, it was too near the house of Barns to be directly suspected, and the country below it was still loyal

and with no taint of Whiggery.

Here, then, I settled myself, and made a comfortable abode in a dry burn channel, overarched with long heather. The weather was unusually warm and dry, the streams were worn to a narrow thread of silver trickling among gray stones, and the hot sun blazed from morn to night in a cloudless sky. The life on the whole was very pleasing. There was cold water from a mossy well hard by when I was thirsty. As for food, I made at once an expedition to the nearest cottage on my lands, where dwelt one Robin Sandilands, who straightway supplied all my needs and gave me much useful information to boot. Afterwards he came every second day to a certain part of the hill with food, which he left there for me to take at my convenience. Hence the fare was something better than I had had in my previous hidingplace. Also, it was a cheerful life.

However, ere June had merged in July, I found myself in want of some companion to cheer my solitude. I would have given much for some like-minded fellow-way farer; but since that might not be had, I was fain to content myself with a copy of Plotinus, which I had got with all the difficulty in the world from the house of Barns. It happened on a warm afternoon, when, as I lay meditating as was my wont in the heather, a great desire came upon me for some book to read in. Nothing would do but that I must straightway set out for Barns at the imminent peril of my own worthless life. It was broad daylight; men were working in the fields at the hay; travellers were passing on the highway; and, for all I knew, soldiers were in the house. But with a mad recklessness I ventured on the quest; and entering the house boldly, made my way to the library, and was choosing books. Then I was startled by the noise of approaching steps, and seizing hastily the first volume I could lay hands on, I set off for the hills at the top of my speed. The visit had renewed old recollections, and I spent a bitter evening reflecting upon my altered position. Howbeit, those who seek it will soon find it in the book of philosophy which I seek soon to publish with Master John Herries, in the West Bow of Edinburgh.

But toward the end of October, when the nights grew long and the sunsets stormy, a change came over the weather. The Lammas floods first broke the spell of the drought, and for three clear days the rain fell in torrents, while I lav in my hole, cold and shivering. These were days of suffering and hunger, though I shrink from writing of them, and have never told them to any one. On the fourth I made an incursion down to my own lands, to the cottage of my ally. There I heard evil news. The soldiers had come oftener than of late, and the hunt had been renewed. The reward on my head had been doubled, and with much sorrow I had the news that the miller of Holmes Mill had been taken and carried to Edinburgh. In these dim, gray days my courage fell, and it took all the consolations of philosophy, all my breeding and manly upbringing, to keep up my heart. Also, it became more difficult to go at the three weeks' end to the cairn on Caerdon with the letter for Marjory.

It was—as far as I remember, for I did not keep good count-on the second day of September that I set out for Caerdon on my wonted errand. I had had word from Robin Sandilands that the country-side was perilous; but better, I thought, that I should run into danger than that my lady should have any care on my account. So I clapped the written letter in my pocket, and set out over

the hills in a fine storm of wind.

I went down the little burn of Scrape, which flows into Powsail about a mile above the village of Drummelzier. Had I dared, I would have crossed the lowlands just above the village, and forded Tweed at Merlin's grave, and so won to Caerdon by Rachan and Broughton. But now it behoved me to be cautious, so I kept straight over the hills; and, striking the source of a stream called Hopecarton, followed it to where it joined the river in the Mossfennan haughs.

All seemed quiet. The stream, now changed from its clearness to a muddy brown, was rolling on its way through the fields of stubble. The few houses smoked in peace. The narrow road was empty of travellers. . . . Without hesitation I ran down the slopes, caring not to look circumspectly to the left and right. . . .

I had not run far till something before me brought me to a halt and sent me flat among the grass. Just below the house of Quarter, coming from the cover of the trees, was half-a-score of

My first thought was to turn back and give up the project; my second, to go forward and find a way to cross the valley. Happily, the foliage was still there, the heath was still long, the grass was dense: a man might succeed in crossing under cover.

With a beating heart I crawled through the heather to the rushes beside a little stream. This I followed, slowly, painfully, down to the valley, looking sharply at every bare spot, and running for dear life when under cover of bank or brae. By-and-by I struck the road, and raised myself for a look. All was quiet. There was no sign of any man about-nothing but the beating of

the rain and the ceaseless wind. It was possible that they had gone down the vale, and were by this time out of sight. Or maybe they had gone up the water on their way to the moors of Clyde. Or still again, they might have gone back to the house of Quarter, which they doubtless loved better than the rainy out-of-doors. In any case they were not there, and nothing hindered me from making a bold sally across the open.

I rose and ran through the corn-field, cleaving my way amid the thick stubble. The heavy moisture clung to my soaked clothes and the sweat ran over my face and neck; but I held straight on till I gained the dry-stone dyke at the other side, and scrambled across it. Here I fell into the stream and was soaked again; but the place was not deep, and I was soon through. Now I was directly beneath the house, but somewhat under the cover of the trees; and still there was no sign of man nor beast. I began to think that, after all, my eyes had deceived me, and taken nowt cattle for dragoons. Such a trick was not impossible; I had found it happen before at the winter's shooting. With this pleasing hope, I straightened my back and ran more boldly up the planting's side till I gained the moorlands above. Here I paused for a second to enjoy my success and look back upon the house.

Suddenly something rang past my ear, with a whiz and a clap, and a voice behind me cried, 'Stop! Gang another step and I fire.' So the cup of safety was dashed from my lip at the very moment of tasting it.

I did not obey, but dashed forward to the high moors with all my speed. It was conceivable that the men were unmounted and their horses stabled, in which case I might get something of a lead. If not, I should very soon know by the clear, convincing proof of a shot in my body.

My guess was right, and it was some little

time ere I heard the cries of pursuers behind me. I had made straight for the top of the ridge, where the ground was rough for horses, and I knew that they could not follow me with any speed. I was aye a swift runner, having been made long and thin in the shanks and somewhat deep-chested. I had often raced on the lawn at Barns with my cousin for some trifling prize. Now I ran with him again, but for the prize of my own life.

I cannot tell of that race, and to this day the thought of it makes my breath go faster. I only know that I leaped and stumbled and ploughed my way over the hillside, sobbing with weariness and with my heart almost bursting my ribs. I never once looked behind, but I could measure the distance by the sound of their cries. The great, calm face of Caerdon was always before me, mocking my hurry and feebleness. If I could but gain the ridge of it I might find safety in one of the deep gullies. Now I had hope; now I had lost it and given myself up for as good as dead. But still I kept on, being unwilling that any one should see me yield, and resolving that, if I needs must die, I would stave it off as long as might be.

In the end—after hours, or was it minutes?—I reached the crest and crawled down the other side. My pursuers were still some distance behind, and labouring heavily. Near me was a little ravine, down which a slender trickle of flood-water fell in a long cascade. I plunged down it; and, coming to a shelter of overlapping rock, crawled far in below, and thanked God for my present safety.

Then I remembered my errand and my letter. I clapped my hand to my pocket to draw it forth. The place was empty; the letter was gone. With a sickening horror, I reflected that I had dropped it as I ran, and that my enemies must have found it.

THE FUTURE OF ELECTRICAL ENGINEERING.



IE most striking feature of the recent developments in electrical engineering science to the lay mind is the ease and completeness with which the electric current can be converted into other forms of energy at will.

The modern electrical engineer has indeed obtained a very remarkable command of this strange, elusive force that we call electricity, and in recent years he has given many noteworthy proofs of his progress in utilising it for the service of mankind.

It will no doubt surprise many of our readers to hear that these modern applications of electricity are in nearly every case based upon facts or laws discovered by Davy and Faraday three-quarters of a century ago. The discoveries of these two noted men in the realm of electrical science earned for

them undying fame, but they did not lead at once to the practical application which many of their contemporaries had no doubt expected to see. Excepting in land and ocean telegraphy, progress was slow; and until the commencement of the eighties the practical applications of electricity outside the field of telegraphy were few in number and unimportant in character. Since the year 1880, however, there has been a most rapid development in many directions; and in the coming century electrical engineering, in the opinion of those well qualified to judge, is destined to occupy a position of supreme importance. order to enable our readers to understand the progress of the past fifty years, and to form an independent judgment concerning the hopes of the future, we shall give in this article an

explanation in non-technical language of those applications of electricity to the affairs of daily life that may be seen in our towns and cities at the present moment. In electrical science, as in other things, correct knowledge of the present is the most certain basis upon which to build judgment of the future.

If the various practical applications of electricity in the world about us be carefully scrutinised, they will be found to fall into three broad groups or classes. In the first will be found those applications depending upon the conversion of electricity into mechanical movement; in the second, those applications depending upon the conversion of electricity into heat; and in the third will be gathered those depending upon its conversion into chemical activity. Let us now examine these in detail.

Faraday, in one of his most notable experiments, discovered that if a piece of copper wire be bent into a closed ring, and be moved to and fro in the vicinity of a powerful magnet, currents of electricity flowed through the wire ring. These currents are called 'induced currents.' Repeating this experiment in another form, he found that if a light magnetic needle be suspended in the centre of the copper wire ring, and an electric current be passed through the latter, movement of the needle occurred. From these two comparatively simple experiments have sprung all those applications falling into the first group—that is, depending upon the conversion of electricity into mechanical movement.

Land and ocean telegraphy were the earliest practical applications of these principles; and it is instructive to note that it is only within the last fifteen years that the 'Society of Telegraph Engineers' has changed its title to the broader one of 'Institution of Electrical Engineers.' Telegraphs do not demand large currents of electricity; to this fact their early development was no doubt largely due.

A second application of small currents of electricity was perfected in the eighties—namely, the telephone. Twelve years ago this instrument was a novelty except in scientific circles; to-day it is an almost indispensable adjunct of business and social life. A perfect network of overhead wires in all our cities and manufacturing towns bears witness to the importance and extent of the telegraphic and telephonic systems. The first step in opening up all new countries is to erect a telegraph-line, and the telegraph-post has become one of the most infallible and most visible signs of civilisation. The world is now invested in a meshwork of cables and land-lines continually growing in extent and complexity; and through the operations of these it has become, in its social and political aspects, singularly subject to nervous shocks. In spite of this drawback, the telegraphic and telephonic systems will continue to grow, for their utility is unquestioned. The branches of electrical

engineering connected with these two developments will therefore expand, and the progress in the future may certainly be expected to rival that of the past.

To turn now to other applications of the same experimental truth—that mechanical movement of coils of wire in the neighbourhood of powerful magnets produces electric currents—we find that the dynamo and the electric motor are both based upon this same principle. These appliances are, in fact, closely related to the telegraph instrument and to the telephone; their chief distinction lies in the magnitude of the currents which they produce or utilise. The dynamo is the machine by which mechanical motion is converted into electrical currents on a large scale; the electric motor is the machine which performs the opposite service. It is owing to the invention and perfecting of the dynamo that many of the more recent applications of electricity have become possible; for, while chemical batteries were the only source of electrical energy, the cost of the current rendered such applications wholly impracticable. In the past the chief use of the dynamo has been in connection with the electric lighting industry; but in the more recent developments of electric traction and of power-transmission upon a large scale the dynamo is also a most essential element of success.

For traction purposes the dynamo is used in conjunction with the electric motor. At some centrally-situated spot the boilers, steam-engines, and dynamos are set down, and the current generated here is carried by overhead or underground conductors to the tram or railway car on which it is to be used. For street vehicles this plan is impossible, and the current has to be passed into what is called a 'storage battery' carried by the vehicle itself. In all cases where motion is required, the current is allowed to pass through the electric motor with which each type of vehicle is provided, and the revolutions of the motor are then communicated by means of suitable gearing to the wheels of the vehicle. One of the earliest electric railways was erected by Messrs Siemens at the Giants' Causeway in 1883. A considerable number of schemes have been carried to completion in this country since that year; but the development has been slow compared with that witnessed in Germany and America. The advantages which especially fit electricity for use in cities and towns, as the propelling power for street vehicles, trams, and railways, are the freedom from smoke, foul gases, or dirt, and the facilities which it offers for attaining a rapidity of transit impossible by the present methods of propulsion. It is therefore not surprising that electricity is rapidly growing in popular favour for purposes of city traffic; and in fifty years (many would assert in a much shorter period) it. is doubtful whether it will be possible to find in any city of Europe or America either trams or city railway cars propelled by horse or steam power. The city cab and bus horse will also give place

to this new propelling agent; and the fact that four electric vans have already commenced to run between the G.P.O., London, and the district suboffices indicates still further displacement of the faithful horse. Electricity has therefore a very wide field of usefulness open before it in connection with the transport of men and merchandise in cities; and those branches of the electrical engineering business dependent upon this development will be kept busily employed for many years to come.

The dynamo and electric motor have also appeared in vet another domain of activity, and present indications point to a considerable growth in this direction in the future. The transmission of the power developed by the steam-engines in large mills and factories to the various points where it is utilised has in the past been effected by mechanical means. Long shafts and belt-gearing. however, entail great loss of power; and there is now a decided movement in favour of electric transmission. This is effected as follows: the energy developed by the engines is converted into electrical energy by means of the dynamo; copper conductors are then used to convey the electric current to the different points where the power is to be used, and electric motors of various sizes reconvert the electrical into mechanical energy at the moment and for the period it may be required.

This method has been adopted in many engineering works in Germany and America, and its introduction into this country has already occurred.

The still more extended applications of the method in connection with the development of power from falling water has been noticed in an article in the January issue of this *Journal*, and from wind in the article 'The Wasted Wind' in the April issue.

Faraday's simple experiment connecting mechanical movement and electrical energy has therefore received marvellously wide and extended application; for telegraphs and telephones, electric trains, railways, and cabs, and schemes of power-transmission in factories and works, are all the direct outcome of this experiment made nearly three-quarters of a century ago.

In the second group of the applications of electricity are found those depending upon the conversion of electricity into heat.

The laws governing the relationship between electricity and heat were discovered by Faraday and Ohm; but there is no doubt that Davy had noticed, in his electro-chemical experiments, that while platinum was heated to redness by the electric current, copper remained under similar conditions comparatively cold. All applications of electricity to lighting or heating purposes are merely developments of the facts and laws discovered by these noted investigators early in the century. In the small incandescent lamp the electric current is allowed to pass through a carbon filament, which is heated in consequence to whiteness. If air were present the filament would

quickly burn away, but by enclosing it in an hermetically sealed glass bulb and exhausting the air, the combustion of the white-hot filament is avoided. In the arc lamp the air takes the place of the carbon filament of the incandescent lamp, and the obstacle—or 'resistance,' to use a technical term—imposed by the air-gap between the points of two carbon pencils is the direct cause of the dazzling chain of carbon particles that is carried by the current across the gap.

In the electric furnace, the 'resistance' of the materials which are to be heated is sufficient in many cases to produce the heat required when the electric current is made to pass through them. In other cases the electric are is used in the furnace, since its temperature is higher; for dry air offers a greater 'resistance' to the passage of the current than any solid materials.

With regard to the past growth and present developments of these applications of electricity, the electric lighting industry, as the oldest, of course stands in the forefront. It is difficult at times to realise that only fifteen years ago the electric light was more or less of a novelty. Today every city and town of any pretensions in both the New World and the Old is provided with the electric light, and the number of users of electricity for lighting purposes is rapidly growing. As in the case of electric traction and power-transmission, it is chiefly the convenience and simplicity of the method of use that is favouring the adoption of electricity as a lighting agent. The cost is still higher than that of gas or oil; but as the number of consumers increases the cost will fall, and this is an influence that is already making itself felt in winning new customers in many towns. The electric lighting inclustry will therefore undoubtedly continue to grow.

Though electricity as a heating agent is much more expensive than coal or gas, the practical applications of electricity for heating purposes are increasing in number. Two advantages balance this greater cost: the intensity of the heat obtained, and the wonderful convenience of its application. In the electric furnace temperatures can be obtained that are unattainable by any of the older methods of heating, and two manufacturing industries have been founded upon this use of electricity. Carborundum and calcium carbide, products of the electric furnace, cannot be made on a large scale in any other way. Electric welding is another application of electricity in which effects are obtained that cannot be arrived at by ordinary methods. Here the localisation within a small area of a very intense heat is desired, and the electric arc, or the heat produced by the local 'resistance' of the metal to be welded, is made use of to create the required welding temperature. Electricity as a heating agent for domestic use has not made a great advance, although here again its convenience is much in its favour. The last hotel erected in New York has, however, been fitted throughout, as regards the bedrooms, with electric heating appliances; and such diverse ends as heating curling-tongs, frying pop-corns, and airing the bed, can all be effected by the mere insertion of plugs into sockets in the walls. Electricity as an agent for producing heat has therefore already attained a fairly wide field of utilisation, and progress in the future is certain to occur.

In the year 1807 Davy was experimenting in the laboratory of the Royal Institution, London. upon the action of the electric current when passed through fused salts, or solutions of the same. It was during these experiments that he discovered the alkali metals potassium and sodium, and raised himself to a position of pre-eminence among the chemists of Europe. The practical applications of Davy's discoveries relating to electro-chemistry, as in the case of those of Faraday relating to light and heat, were long delayed, owing to the absence of any cheap source of electrical energy. With the advent of the dynamo, electroplating and electrotyping developed into extensive minor industries. Electroplate is everywhere in evidence; and this manufacture is certainly one of the most useful and successful applications of Davy's and later workers' investigations concerning the deposition of metals by the electric current. It is not so generally known that electrotyping is an equally important industry. In the printing trade the preparation of electrotypes is one of the chief features of the quick methods of reproduction now employed, and many of these methods would be impracticable were it not for the ease and convenience with which exact replicas of printers' and engravers' blocks can be obtained in the electrolytic

Still more recently the development of water-power for industrial purposes has led to a great reduction in the cost of electrical energy, and a large number of electro-chemical industries, based upon the principles discovered by Davy over eighty years ago, have sprung into existence. The mere enumeration of the metals and chemical products that are now being manufactured by these new processes in Europe or America upon an industrial scale will serve to show how wide a field of usefulness has been opened by the labours of electro-chemists and electrical engineers. Aluminium, antimony, chromium, copper, gold, magnesium, nickel, potassium, silver, sodium, zinc, phosphorus, ozone, alkalies, bleaching - powder, bleaching - fluids, potassium chlorate, galvanised iron, and numerous organic products are all being produced by processes in which electricity plays a part at the present time. These new methods of production are in many cases highly successful, and the older methods of manufacture have already disappeared, while in others such disappearance is only a question of time. Though it is possible that some of the manufactures included in the above list may not survive the test of commercial trial, electro-chemistry is undoubtedly one of the most promising branches of applied electrical science, and its growth and expansion in the future are assured.

This review of those applications of electricity that are actually accomplished facts—not mere visions of the future—proves that electricity in the hands of the electrical engineer will occupy a foremost place among the applied sciences in the coming century, for its sphere of action will embrace every department of our social and industrial life.

A MYSTERY OF THE SWORD.

PART II.—CONCLUSION.



OU will have perceived the points which struck me as curious in this interview. For one thing, Stuttgart is not within the kingdom of Bavaria. For another, this person had learned my identity

with sang froid. Now I not only flattered myself that my reputation had penetrated into Germany, but I had good reason to be aware of the notorious fact that nowhere in the world is the law of caste so powerful as amongst the arrogant nation we have such deep cause to hate. Yet only on second thoughts had it occurred to M. von Stulbach that my social standing was not sufficiently high to afford me the honour of crossing swords with an aristocrat—such as a Von must needs be over the border.

On the next day it was rumoured that Von Stulbach had ceased to show himself in public,

and in the evening the corner table at the café was without an occupant. Some said he had left Paris, others that he passed the entire day fencing in one of the schools; but Hallard declared that he had seen him in the Bois in the course of the morning.

'Immersed in speculations, I awaited the reply to my telegram with impatience.

'Meanwhile M. le Capitaine haunted my salle-d'armes, and practised diligently, but without making any progress. As far as I could judge, his adversary had but to protrude his sword and my pupil would inevitably impale himself upon it.

'On the eve of the decisive morning I asked my client if he had provided himself with a second.

"You smile, monsieur; but pardon me if I say that your countrymen consider but slightly the conventionalities of societies other than their own. We of the Latin races are not too self-centred to adopt all that we see of good in your institutions. For instance, we admire your methods of sport, and follow them; we appreciate and patronise your tailors of London. But your nation is more narrow and self-satisfied. You care to annex nothing outside your own shores—except, perhaps, continents!"

'Captain Brerliam replied that a friend was coming over from England that night to act for him.

"You seem to have seen Von Stulbach," he added, "but can gather nothing about his antecedents. Is it not odd that he should be so completely unknown? Well, as I said before, I am out of my depth in this affair. Good-bye. If I live until to-morrow I'll look in and tell you what happened."

'He swung out of the door, his sunburnt face working, and repeating "till to-morrow," as if it were with me and not with the German that the

quarrel lay.

'During this interval I had in private been perfecting myself in certain coups of which I alone possessed the secret. From my standpoint it was difficult to forecast the future. Up to the moment when I parted from M. le Capitaine I had received no reply from Stuttgart. I almost despaired of gaining the information I had hoped for, but it came at a late hour, and proved to be of a most explicit nature.

'The duel was to take place in the park of St Ouen; and, acting on my advice, my client went down with his second the night before and slept at

an inn in the vicinity.

'Therefore, to reach M. le Capitaine before the encounter, I rose at dawn, and having partaken of a cup of coffee, I proceeded by the earliest train to St Ouen. I kept a lookout for M. von Stulbach's

party, but saw nothing of them.

'Alighting on the platform in a shower of drizzling rain, with the signals and doors shaking in the cold wind from the river, I made haste to the inn, where I found myself well in advance of the appointed hour. Being informed that the Englishmen were not yet risen, I took upon myself the duty of awakening M. le Capitaine.

'After knocking at the door I entered.

"Time to get up? All right!" he growled; then rousing more fully, he recognised me. "Hullo M. Desterre! Anything wrong?"

'For answer I begged to be allowed to address the gentleman who was to act in the interests of

M. le Capitaine.

"He's in there," replied Captain Brerliam, indicating a second door. "But if there's anything in the matter you can tell me"—

'I began to explain that I should preferwhen the door burst open and a young man rushed

headlong into the apartment.

"Time, old man! Up you get! You've got to stick the Doitcher"—by which name he throughout continued to allude to M. von Stulbach—"in less

than an hour—I beg your pardon—— But who the dickens is this?"

"May I have the honour of a word with you, monsieur?" I interposed, adding an intimation as to who I was.

"Right you are, sir!" exclaimed this gentleman. "You'll excuse me—early hours, you know—and it's cold. Come along."

'With that he preceded me into the adjoining room, where he requested me to sit down, while he scrambled back into bed, clasped his hands round his knees, and professed himself ready to listen.

"By-the-way, my name's Guspitt," he added.

'Then I informed this M. Guspitt of certain facts. At the end of my recital he sprang from his bed.

"You're a fine fellow, sir," he cried—"a deuced fine fellow! And if ever you should want a friend in any way, I beg you will apply to James Guspitt, barrister-at-law."

'Upon this the impulsive young man seized my hand and inflicted upon it a pressure I did my utmost to return; though, indeed, my fingers felt somewhat paralysed by the stress of his gratitude.

"Shall we leave this Doitcher to cool his heels?"

he demanded, drawing up a blind.

"I think, monsieur, we must appear on the field. An interview is at least advisable."

"Of course, of course! I'll interview him at the end of a cane, sir!"

'I realised that such an interview might be unpleasant, for I, who am a judge of men, saw the muscles jump out on his arm.

"It grows late, monsieur," I said, "and your friend must start shortly."

"I won't be half-a-minute," he responded.

'And, in effect, as I left the room I heard this grampus of a man plunging and splashing in a bath of icy water.

'In a short time they joined me at breakfast, M. Guspitt having recommended something more solid than coffee and rolls to fight on that cold morning.

'Captain Brerliam was inclined to silence, M. Guspitt continually urging him to decapitate the Doitcher, and laughing when I endeavoured to explain that such a course would be impossible.

When we rose M. le Capitaine grasped the hand

of M. Guspitt.

"I'll pink him all right, old chap," he said; then turning to me, he continued: "M. Desterre, I am infinitely indebted to you for all you have done. As to repaying you—why, that may be the affair of my executors."

Then we stepped out and walked quickly into the park. The morning had improved, and it was fine overhead, though the wind still blew sharply from the north. I need not describe the spot to you, monsieur. You know it—the little, level sweep of grass behind the thicker-growing trees close to the river-side.

'On coming round this belt of woodland we per-

ceived M. von Stulbach, dark-browed and sullen, already on the ground with his second. They were pacing up and down. At sight of us the second advanced. M. Guspitt detached himself from us to meet him.

'After the usual salutations the other said in a loud tone:

"You are late, monsieur! Shall we place our men?"

'The words were unmistakably meant to reach the ears of Captain Brerliam, and were calculated to incense a person of his hasty temper. This in itself was an offence of an unpardonable nature.

'M. Guspitt smiled.

"I shall have great pleasure in kicking your man, sir!"

'I stepped forward to interpose. Captain Brerliam stood appalled.

"Guspitt!" he cried, frowning.

'But M. Guspitt had placed himself facing Von Stulbach.

"Yes, I shall deal with you, sir," he exclaimed threateningly.

"Afterwards, monsieur, afterwards—with pleasure," replied the German, with a sneer. "But first I must finish my affair with your principal."

"There will be no 'afterwards,' cried M. Guspitt.

"Any affair will be with me, and of a very different sort to that you propose with Captain Brerliam. You're known, sir!"

'I, who was watching the face of the German, saw it contract slightly.

'M. Guspitt, turning to his friend, went on :

"If I were you I'd flog him, Brerliam."

'Meantime the German's face flamed, while M. le Capitaine gazed from one to the other in amazement.

"Stand back!" shouted the second of Von Stulbach, coming between them. "You cannot withdraw from the encounter now. All this mad bluster is useless."

'M. Guspitt spoke more collectedly.

"It is impossible that this duel should take place. Brerliam, this man is not Von Stulbach, as he calls himself, but Worsen, a fencing-master of Stuttgart, hired to do the work of an assassin! We owe the discovery of the plot to M. Desterre."

"Is this so?", said M. le Capitaine.

"Of course it is!" exclaimed M. Guspitt. "Otherwise would I be saying it?"

"M. Brerliam is over ready to believe these absurd statements," remarked Worsen—as I must now call him—with a disagreeable accent.

"We have ample proofs," I hastened to say.

'Captain Brerliam wheeled round and stared in the countenance of his adversary; then he uttered one of his big, sudden laughs.

"Do you want a proof? I can give you one, then!" and with a swift movement he plucked the beard from Worsen's face. "Who put this new courage into you, man? You had no stomach for our last meeting at Berlin?" 'Then he advanced upon him with an aspect of fury.

"I've a mind to give you a good hiding! Who

sent you?"

'Worsen shrank back, but remained silent. We of the continent of Europe are not fond of the jeu de mains, as are the English. Besides, I have often observed that a man who will face a danger to which he is accustomed with coolness loses his nerve when confronted with one that is strange to him. Now, I had no doubt whatever that Worsen, though perfectly ready to meet the blade of the first swordsman on earth, had been unable to bring himself to look at death down the pistol-barrel of M. le Capitaine, nor at this moment could he endure the indignity and suffering of a hammering by the fists of this big Englishman. I felt for him, monsieur; I felt for him, in spite of all.

'The man of Stuttgart turned to me.

"I owe this to you," he said harshly. "From you at least I can demand reparation."

"Will you leave this matter in my hands, M. le Capitaine?" I said. "Nevertheless, M. Worsen, I believe I could, under the circumstances, refuse to meet you."

'Worsen sprang forward and struck me lightly on the chest.

"Coward !" he exclaimed. "I knew it !"

"You have already said so twice," said I.

"I will proclaim it to all France," he cried, "if you continue to refuse me satisfaction."

""There will be no need," I returned quietly.
"We must meet for our individual honour and the honour of our respective nations!"

"No, no, Desterre! this is my affair," broke in Captain Brerliam.

"Leave it alone!" said M. Guspitt, taking him by the shoulder. "Your affair is with the master, not with the servant. And I should advise you, M. Desterre, to have nothing to do with this rascal either. He is unworthy of your sword."

'And that, monsieur, is the story of Captain Brerliam's affair.'

Desterre raised his glass and drained it. The murmuring silences of the summer night closed in upon his voice.

'Then you had a meeting with Worsen?' I asked at length.

'But, yes, monsieur. Ah, there was talk and enthusiasm in Paris about that affair! For I had a reputation then. Personally I was enchanted; he was a swordsman of the first rank. Nevertheless he lacked something—good fortune, perhaps. I had the luck to pass my rapier through his shoulder. My friends and clients held a fête in my honour. But those days are gone for ever! Everything passes, monsieur; everything passes!' he ended sadly.

'And what of Captain Brerliam ?'

'He achieved his wishes; he united himself with the beautiful Countess. One can guess that he made capital out of the affair of Worsen to force

the brother-in-law to see reason—eh? I saw him at Mont St Michel three years ago. He is redder and more sunburnt than ever, but he carries always the same fascination. He and Madame did me the honour to invite me to dinner.'

By this time we were walking down the quiet, white road barred with shadows. Desterre, his head on his breast, had returned in thought to the brilliant days in Paris, for as we parted he said, 'Ah, monsieur, I had a reputation then!'

A SCOTCH TEACHER IN NEW YORK.



HEN I landed in New York, about three years ago, I had no extravagant expectations of getting immediate and lucrative employment; and yet I was not prepared to find it so difficult to get placed.

The objection to employing me—one which I met at every turn of the way in the first few months of my quest for work—might be formulated as follows: 'You appear to have the qualifications necessary for the position, and personally you would be acceptable to me; the only fear I have arises from the well-known fact that American boys are so unlike English boys, and require different methods of discipline.'

I first tried a well-known school agency in New York, which sent me several notices of vacancies in out-of-the-way places. For the nearest of these I applied by letter—it was in a ladies' college in Virginia; but, convinced by the lady principal's answer that what she really wanted was a sort of spiritual overseer and factotum, rather than a plain teacher of the humanities like myself, I dropped the negotiation and paid no further attention to agency vacancies.

At last, through persistent watching of the advertising columns of the leading newspapers, I did succeed in getting a position in New York as teacher of classics and mathematics in a school of about fifty boys. It was a preparatory or secondary school, and as it was not a boardingschool, I congratulated myself on being well rid of the galling burden of playground and domestic supervision under which I had so long chafed in England. I may here mention that, after graduating in Arts at the University of Edinburgh, I had taught in a Scotch school for one year; and then, after some months of private tuition, accepted a situation in an English boarding-school, where the salary, exclusive of board and lodging, amounted to sixty pounds a year. My salary now was to be seven hundred dollars (about £140), a figure which many American teachers would have turned away from, but which my circumstances did not permit me to decline.

As I have said, I had been repeatedly warned of the difference between American boys and British boys; and certainly, if their conduct in the home, and especially in the street, was to be taken as the criterion, the difference is patent to any observer who keeps his eyes open. But when

I came to meet them in a well-ordered schoolsuch as this one undoubtedly was-I found no such radical differences as had been predicted. Americans are too ready to assume that English boys are tyrannised over at school, and that no such pleasant relations as often obtain in their country between teacher and scholar can exist in a Scotch or English school. It is as difficult to convince them of the contrary fact as it is sometimes to make them believe that members of parliament receive no pay for their services. At any rate, I found it no such hard matter to manage a class of sixteen well-grown American boys; indeed, they proved, as a rule, to be not only apt and intelligent at their work, but remarkably attentive and respectful in their deportment as well. There was not a really troublesome boy in the whole lot, the only source of embarrassment being a chubby-faced youth of German stock, who had a turn for practical joking, though he weighed about 250 lbs.

About half of my class had passed through the regular course of the school from the primary department up to the graduating class. These were pretty well grounded; but the class as a whole would not have attained to a satisfactory standard if tried by a British test. One thing I considered largely to blame for the shambling, unsolid character of these boys' performances was the absurd system of marking up for lessons in vogue in the school. An average of 90, per cent. was what everybody looked for, while 60 per cent. was downright failure; and when a boy got a succession of low weekly averages he was very apt to take the huff, and by-andby he might be heard of as attending some other school.

My boys were handicapped in still another way. Some time before Christmas they were set to 'memorising' orations, dialogues, and passages of Latin and Greek for recitation at the annual entertainment to be given by the school before closing for the holidays. Of course it resulted in their proper work being performed very perfunctorily, when it was not neglected altogether. When the great day, or rather evening, arrived, and the first part of the programme had been successfully rendered, the principal ascended the platform, and, making his bow to the packed audience, read off from a report-book a few details regarding those precious averages, which

seemed to be assumed by everybody to be exactly commensurate with the proficiency of the

nunila

Still another and most serious thing interfered with the efficiency of the class. There was no rigid and impartial examination awaiting it at the end of the session, to put the boys on their mettle, as is the effect on an English school by the approach of the emissaries of the Oxford and Cambridge Schools Examination Board; or as used to be the case in Scotland, in my earlier days, when the event of the year was the examination of the whole school by a deputation of the ministers of the presbytery, whose faces loomed fatefully on that morning behind a pile of glittering prize-books on the master's desk. Here the examination of my classes was to be conducted by myself, under the general supervision of the principal, at the end of the school year in June, or the end of May. In the public schools, of course, a much more rigid and effective system prevails, the examinations in them being periodically conducted by the Superintendent of Public Instruction and his staff of assistants.

Long, however, before our 'commencement' day arrived—that is, the day for the final exercises of the school, when the public were again admitted-a whispered rumour had been going the rounds of the older teachers, which, when it reached my ears, sent a cold thrill down my spine. It was to the effect that, owing to causes which had been at work for some time back, the school was not paying, and that some of us would have to go without our last two months' salary. To pass over this miserable experience, I must do the principal the justice to say that he showed a creditable feeling for me in my hard position, without money or friends in a strange land, by recommending me for some other work, which, though not of a very congenial nature, stood me in good stead during the long and trying summer months-that sweltering, dusty, noisy season in American cities, when to the forlorn Britisher, unable to leave the scorching city, life seems not worth living.

I declined to re-engage with this principal for the following year, even with the bait offered of an increase of salary (that might never be forthcoming), preferring to try for what I could get in the way of private teaching. After many failures in this direction, I at last struck out a form of advertisement which soon brought me plenty of pupils—of a kind. It might be amusing. but not profitable, to expose the pecuniary value of a tutor's services, as estimated by many worthy people. In America the teacher in a good school gets much more than he does in the average school in Britain; but when it comes to private tuition, conditions seem to be reversed, and the reason, or at least the chief reason, is not far to seek. The public school in America takes a good deal of the ground from under the feet of the private teacher, because it

not only imparts an elementary training to the children of all classes who choose to avail themselves of it, but it also largely serves the same purpose as the middle-class secondary school of Great Britain. In America one has to go up a step or two in the social scale to reach people with the means for employing private tutors. The possession of such means implies also a certain degree of culture; and consequently a private tutor is better off in America than could be expected in a country where the influence of a public school system extends to almost every rank of the community. As it is, large numbers of people, intelligent but not particularly cultivated, have means enough to hire private teachers for special purposes, at rates more directly dependent on the general trend of business than is the case in England and Scotland. And there is no such demand for the services of the private teacher in the United States as there is in Britain in connection with the competitive examinations for the various branches of the Civil Service, as well as for the preliminary examinations of certain professional bodies. Civil Service reform is still in its first stages in America, and it is questionable, under the present system of government, if its principles can ever be very generally put in practice.

It was among this large and thriving class of citizens that my work now lay for some time, and my most pleasant memories date from this intercourse, for several of my patrons were not only satisfactory pupils (adults) in a twofold sense, but also extremely sympathetic and companionable as fellowsojourners in this vale of the teachers and the taught. I had pupils of every age above childhood, of both sexes, and of almost every European nationality and condition of life. I prepared young men for college entrance examinations, and brushed up squads of young clerks in their grammar and arithmetic, but could never get them (or my young lady pupils either, fluent and stimulating as they might be in their talk) to write down their thoughts in simple, idiomatic English. I read Latin with patient and reasonable lawyers-who almost invariably make satisfactory students-and German with testy and unreasonable physicians, who, in their burning impatience to be put in the way of reading the German medical periodicals, required of their teachers an exercise of power which they would have called miraculous if demanded of themselves by their patients. I taught heads of families their (English) letters, and gray-beards the extraction of the cube root and the solution of triangles. And almost in every case I found the foreign-born pupil, or the pupil born of foreign parents, whether German, or Swede, or Irish, or Cuban, or South American (I had none British), to be both brighter and more persevering than the descendants of longestablished American ancestry-a fact to be accounted for by the anthropologist and not by

the teacher, who must take men as he finds them in that seething caldron of the nations henceforward to be known as Greater New York. The chief faults of those of American descent, especially of young men in business, who came to me to be intellectually groomed were engrossment in social dissipation and 'raw haste, half-sister to delay.' They were amiable and even-tempered to a degree, but fickle and easily discouraged; even those of them with more backbone than the average were at the bid of every call of pleasure, or too impatient of results from their work. The heritage of even a go-ahead temperament is not without its disadvantages, as enlightened Americans will readily admit.

As I had many excellent pupils whom I shall always hold in pleasant remembrance, so, as might be expected, an indiscriminate fisher such as I was must sometimes have netted strange fish. On the principle of ex pede Herculem, I shall give an instance or two of these.

A young man wanted very badly to enter Harvard University in the following fall termit was March when he came to me. Accordingly we set to work, reading Casar first; but when he had glibly rattled off the first few well-thumbed pages of his book and emerged into pastures new, his eagerness oozed out, and he collapsed. On my reporting this discreditable breakdown to his father, who was a commercial man, I learned that the boy's sole ambition in wishing to go to college was to shine as a member of one of the athletic societies, of which, it appeared, his elder and more gifted brother was already a distinguished ornament. A tip-top university stamp for his muscle was all the young jackanapes was after; but, unfortunately for his aim, his pluck was not equal to his ambition, and he returned to his desk in his father's office, to the no small satisfaction of the latter, who doubtless felt he had done his part in surrendering one son to the Moloch of college athleticism.

One day a tall, stylishly-dressed young person came to me on somebody's recommendation, and was not long of letting me into the secret that she had leanings towards a career on the stage. She wished, before entering a school of acting, to read portions of the English drama under my guidance, with the view both of making some acquaintance with the literature of the stage and of improving her pronunciation. She spoke with a strong German accent, appeared to be very illiterate, but also very positive and self-sufficient. I took down the comedy of She Stoops to Conquer, to test her reading and expression, and when she had floundered through a scene or two in an execrable manner, she suddenly asked me to explain the meaning of the title. But my explanation fell flat: the two notions of 'stooping' and 'conquering' were so incongruous to her mind that she could not bring them together in consciousness. Such dense, 'yellow-primrose' literalness of intellect I never met with in any human being before or since.

Another time I was visited by a robust-looking man in the prime of life, who stated that he was a master plumber, and that, being deficient in his arithmetic, he was finding it difficult to keep track of his bookkeeper's accounts, now that his business was increasing. A little fencing, however, elicited the pitiable admission that he was totally unable to read! He could read figures, add a little, and just write his own name-all he had ever learned in his native country-the Green Isle; but though he had hitherto been successful in concealing his limitations from the people about him, certain circumstances had recently given him the alarm, and he had made up his mind to try and mend matters. And what a struggle was his! What pathos in his groping efforts to spell out his way through the primer which his own little son had thrown aside two years before! But night after night, summer and winter, he kept it up, until at last he had his reward, and he could look his little boy boldly in the face, and had no more fears of his bookkeeper.

At one time I had a class of young French-Swiss watchmakers in Brooklyn, who deluded themselves into thinking that they would learn English from a teacher while living clannishly by themselves in a boarding-house where not a word of English was spoken. They were very good, jovial fellows, and sometimes great fun as well; but they took up their daily lesson as if to speak any language but their own was a humiliation to them.

Perhaps the oddest pupil of all was an old man over seventy, a native of Alsace, who wanted to learn geometry, because, after vainly trying to satisfy his craving for knowledge by dabbling in history and philosophy and even modern science, he had come to the conclusion that the only truths which could satisfy a rational mind were the truths of Mathematics! Yet, paradoxical as it may seem, but is not, this arid-minded old fellow, who found even the bald statements of modern science too flowery for his taste, was a religious man, and a churchwarden to boot. Alas! he turned out to be not so singleminded as he appeared. He had his adamantine crotchets, which I, backed by Euclid with chapter and verse, was powerless to remove. He ended his lessons, which had gradually degenerated into ill-tempered altercations with his teacher, by one day breaking out into a savage tirade, not against the equator, but against the Proposition of the Three Squares (Euclid I. 47), and I saw him no more. It was his Waterloo.

But though, sometimes, I had a good run of pupils, the work was poorly paid, when the cost of living was taken into account. A single man who 'sets up for a gentleman' cannot live decently in New York under two pounds a week; and

when it is stated that the average compensation for private teaching is no more than half-a-dollar (two shillings) a lesson—only the fortunate few getting from three to four shillings—it is easy to see that a tutor must be kept very busy indeed to leave any margin beyond a mere livelihood. And there are those three dreadful months from the middle of June to the middle of September to be considered and provided for, when New York is a Sahara to the unfriended foreign teacher.

A TUNISIAN TUNNY FISHERY.



IDI DAUD, where the fishery is, is about forty miles from Goletta by sea, across the Gulf of Tunis, and something over sixty by land. The journey is generally made by sea, as the road is bad; although it can

be done on horseback in eighteen hours, it, as well as the majority of the roads in the regency, is

quite impassable for carriages.

Leaving Goletta, the port of Tunis, twelve miles from the capital, the traveller embarks in one of the native lighters - a two-masted lateensailed craft, destitute of cabin or any accommodation other than a seat on the cargo. With a good wind, Sidi Daud is reached in about four hours. As Goletta fades away the islands of Zembola appear in sight, where the usual track of ships is left, they turning to the left past Cape Bon. The larger of these two islands is inhabited by three or four Sicilian families, who bring the later days of Defoe's hero vividly to mind. Each family lives in a one-roomed stone house, guiltless of mortar. Goats abound, and the islanders milk them to make cheeses, with which, now and again, they venture in the rickety tub owned by the community on a voyage to Tunis-the whole of the male population, four men and a boy, acting as crew. The island simply consists of two mountains covered with a good deal of scrub. It was evidently thought a good point of fortification by the ancients, for it is covered with the ruins of what were once substantial structures. The smaller island adjacent is inhabited solely by gulls and by rabbits, which latter do not breed on the mainland, being at war with the jackals, or perhaps it is the jackals who are at war with them.

Some way out is a reef under water, which forms the port of Sidi Daud. It is thought to have been an ancient breakwater. The whole bay answers to a description in one of Virgil's Eclogues. In bad weather boats cannot make the port at night, and have to run to Hammam Corbus for shelter. In the seventies the White Sea, of 1000 tons, went aground here. The captain refused the help of a crew from the fishery, thinking that they were pirates, and the vessel was totally lost. A French vessel also went ashore there, but eventually, although deserted by all her crew except the captain, mate, and chief engineer, got safely off.

The boat plying between the fishery and the town belongs to a man named Tita, who has a contract to buy as many tunny after each haul as he likes at fifty piastres a hundred kilos (220 lbs.). A piastre or real is there worth sixpence. Tita also serves as post, as he makes fairly regular weekly trips. Whenever he carries any one from the family owning the Tonnaro, or letters, he hoists a flag of which he is very proud—Corriere di Sidi Daud.

When Tita draws up alongside the jetty at the fishery, the visitor is met by the heads of the island, the whole of which is appropriated to the fishery, forming a little kingdom of its own—the Capitano, his son (captain of the fishery steamer), Padre Paulo the priest, and the Doctor. The Padre, of course, represents the church and the Doctor science; and, as has happened in bigger communities, the two are a little at loggerheads.

Going up the town past the seamen's quarter, the principal rooms face what is called the Piazza, and are on the second story. As in all native buildings of any pretensions, the rooms surround an open space or patio on to which they all open; each division consists of two rooms, an outer lobby and a bedroom. In addition to the bedrooms, there is a dining-room, kitchen, store-rooms, and a pharmacy—for, unfortunately, the doctor's services are often in requisition, generally for wounds. There is not much sickness in the island.

One rises at various hours, from three in the morning to eight, when the inevitable cup of black coffee is presented, and, soon after, breakfast, consisting of a bowl of hot coffee and milk, eggs, and a seaman's biscuit; a light lunch and a dinner of mutton or tunny constitute the meals. Kouskousou, a native stew of grain, vegetables, and of course mutton, is a favourite and very good dish. The servants are a sailor, a Moor, and a cook. The Moor is footman and the sailor housemaid. The butter is churned by Arab women in the villages on the mainland by the tedious process of tossing it to and fro in a skin. Meals are turned into a species of torture by the number of flies, despite Padre Paolo, who exorcises them by waving a birch broom over and into everybody's plate.

The seamen live in the High Street, a long row of buildings accommodating them in batches of eight, sleeping in hammocks. Each batch has a boy to fag for it. They are paid standing wages of one franc a day, with a bonus on each fish caught, and a share of each catch, which they sell for their own benefit. One of their most valued perquisites is the roe; but half of this they are bound to sell back to the fishery at a fixed price. They have thus a direct interest in the success of each haul. The mechanics who do not fish have, of course, fixed wages. Law and order is represented by an old Arab named Reis Ali, who persists in augmenting the usual attire of a son of Mahomet by a pair of blue breeches.

The most exciting time for every one is when a haul is made.

Nets are laid out in the beginning of spring in the bay. They form a series of chambers, with a long wall of net which intercepts the course of the fish and leads them into one of the outer chambers. The inmost chamber is made of very strong net, with a flooring of net. If the fish do not enter this of their own accord, the skull of an ox or a horse is let down. This attracts the fish, and when sufficient have entered, another net is let down, and they are secured.

The haul is called a matanza. Work begins about three in the morning, by the boats being towed out to the nets. There are two large boats. the size and build of a Thames lighter, each towed by four smaller ones with fourteen oars. The two large boats form the ends and the others the sides of an oblong corresponding with the size of the inmost chamber where the fish now are. As soon as the boats are moored the men begin to haul up the nets, when the fun begins. As the fish feel the net moving beneath them they rise to the surface, splashing the water with their tails and drenching the spectator who has not had the forethought to bring a waterproof with him. The capitano takes his position in a small boat in the centre of the nets, whence he directs operations, and has a really exciting time. From eight hundred to eleven hundred fish are taken at a time, averaging two and a-half to three hundredweight each, so it will easily be imagined that while the net is being raised they make things very lively. As soon as the net, which requires much noise on the part of the men to raise it, is high enough to bring the fish within reach of the weapons, slaughter, or rather capture, begins. If one is watching the fish rushing about in frantic efforts to escape, it is difficult to see the first attempt at capture; but the fact that it has started is brought to notice by the water being turned to blood colour. A certain number, the elite of the men, are armed with long harpoons or hooks. These seize the fish behind the head and draw them to other men armed with short but strong gaff-hooks. If the men with the long hooks are not very expert to seize the fish in exactly the right spot, they often get pulled into the water themselves, and lose their fish and weapon. About six of the men with the shorter hooks seize the fish and haul it up, when, catching hold of two of its fins, they shoot it over the gunwale into the hold, carefully avoiding a blow from its tail. The largest fish are from nine to ten feet long and six in girth. A good-sized one, but by no means the largest, weighed four hundred kilos (over 7 cwt.). As before stated, a successful matanza means about one thousand fish, and in favourable years two a week are made during a season of about two months-April and May. When all the fish are caught the nets are let down again, and the weary task of towing the loaded boats home commences, under a sun that is just beginning to gain power. The nets are about three miles from the island. On the way home some of the men are deputed to remove the roe and clean the fish.

When the boats get back, about nine o'clock, the fish are thrown overboard and dragged up a paved incline under two arches, which extend into the water. They then have their head and fins removed by three strokes of an axe, are lifted by eight men on to the back of a ninth, who staggers under the load to a beam, where a rope is fixed round the fish's tail, and it is left hanging. It is a great point of honour with the menthat two shall not be employed to carry one fish. By one o'clock all the fish are, or ought to be, hung up, and the men take a rest until evening. The fires are lighted and coppers heated, and at six work begins again, to go on without intermission until ten or eleven the next morning. The first process is cutting up the fish. For this there are three tables about ten feet long, having in front of each a large and somewhat shallow tank with a constant supply of water. It is the duty of the carver to keep this tank full of cutup fish. A tunny is thrown on the bench, and the chief carver divides it, passing half to each side of him, where it is again divided and subdivided until there remain only little pieces of about six cubic inches. There are five men to each table, and less than two minutes suffice for each fish. The pieces are transferred to other tanks for a second washing, and thence to the coppers opposite. They are not put directly into the coppers, but into strainers which fit the coppers, and are carried there by means of a tramway crane. The process, which goes on all night, is weird and picturesque in the dark-the gloomy arches lit by fitful oil lamps, steam from the coppers, the crane bearing a steaming strainer overhead, the smoke from the chimneys, and the noise of the men and music of the choppers. The cooks have ten-foot ladles for stirring the fish, and wear untanned sheepskin aprons and either jack-boots or none. They never adopt any middle course. When pronounced to be cooked, the fish is carried off, strainer and all, suspended on poles on four men's shoulders, and left to cool in an airy warehouse. When the cooking is done, about ten on the following morning, the men

have the rest of the day to themselves, and on the ensuing morning packing begins. The fish is either salted or put up in oil specially brought from Susa. This olive oil is an expensive item for the fishery. The barrels are packed full of fish, and oil poured in and left to soak, more and more being added as wanted. The head cooper examines each cask before it is stored away, about five thousand barrels being filled yearly. Fish is also put up in tins in the same way, but they are steamed before being closed up. The rest of the fish is salted. This, though it does not require so much care at first, is a longer process. The fish is carved in the usual way, but at different tables, and passed to a man standing on the other side of the table, who dips it in salt. It is then put in a barrel. The barrels are stood in the open, and brine poured in; they are then covered over with salt, which is continually renewed until they hold no more.

The fish in oil is for the Italian market, while that in salt is for the Maltese. At Malta it is sold to vessels going east, being much used where there

are lascars on board.

The Campo Santo is wisely placed at the extremity of the island. Here the heads of the fish are hung on beams, and the fins, tails, &c. are left to rot, in which process they yield an oil

readily saleable for medicinal purposes.

Everything wanted for the fishery is as far as possible home-made. Tin plates are obtained from England, and all the tinsmiths' work done on the spot. Boxes and barrels are made in the same way. There are blacksmiths who do all the ironwork, including the old-fashioned wooden-stocked anchor. Shipwrights build and mend all the boats, except, of course, the steamer and larger brigs. The nets are perhaps the most important work done, as miles of netting are required. Esparto grass is served out to the wives of the men-they are mostly Sicilian fishermen, who only come over for the season—who make it up into strands during the winter. Before the fishing commences it is made up into ropes, cables, and nets on the island, and each year after the season it is sold for paper pulp. The only net of hemp is the centre net, in which capture takes place. This has to be very strong, the meshes being about an inch in size, while those of the guiding nets are nearer a foot. During a matanza every one except the head mechanics has to turn to and fish, whatever his natural trade. Sometimes the fishery meets with ill luck. In 1874 no fish at all were taken, the whole of the nets being washed away. If the weather is rough and there is much sea, the fish may jump over the nets and get away, or if a shark gets caught with them they may break the nets in a stampede. Once the nets were cut to pieces by a steamer out of her course. As before stated, the whole island belongs to the fishery; but it is a very short distance from the mainland, with which it is connected by a foot-bridge in a ruinous state of repair, and by a ford. Any one who has travelled about the country always prefers the safety of a ford to the danger of a bridge the parapet of which is repaired with stones from its buttress. There is no fresh water on the island, and to secure this is the real object of the crazy bridge, pipes being laid along it.

As soon as the fishing is over the fish is all sent off to its destination, and the island left to the custody of some Arab care-takers until the

following season.

Not far distant there are a series of caves which are worthy of investigation by some one of better knowledge than that possessed by the islanders. They are elaborately cut in the cliffs, with a shaft to the open air; but there is not even a tradition as to their origin or purpose.

THE ARBUTUS.

HERE Love, with straying feet, shall go
Where Spring's paths meet together;
One way the Winter went, I know;
And it was blust'rous weather.

The snow was falling, wide and white;
In calm it melted slowly;
Again I looked—for well I might—
I saw a blossom holy:

A cream-cheeked thing, on slender stalk, So timid and so vagrant; I might to tropic gardens walk And find no bud so fragrant.

We gathered lilies in the south,
You and I together;
You pressed them to your chin and mouth,
And laughed; 'twas summer weather,

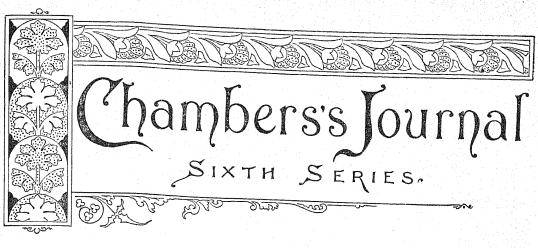
You loosed a lock to fix a rose
That crowned a facry valley;
Caressing it (I saw the pose)
With lightsome wit and sally.

Among the deep blooms of the Fall
I watched your soft hand reaching
Unto (I saw no cardinal)
An answering heaven, beseeching,

But, dear! this trailing, pink-lipped flower,
First of Spring's gentle creatures,
I tender in life's hopeful hour:
The picture of your features.

Green, for your gown; pink, for your blush;
White wreath, for beauty gleaming;
This perfect perfume, for the hush
Of Love, when it is dreaming.

JOHN STUART THOMSON.



DRAGON-FLIES.

By E. STENHOUSE, A.R.C.S.

To-day I saw the dragon-fly Come from the wells where he did lie. An inner impulse rent the veil Of his old husk; from head to tail Came out clear plates of sapphire mail. He dried his whigs: like gauze they grew; Thro' crofts and pastures wet with dew A living flash of light he flew.



ENNYSON was not only a great poet, but a close and accurate observer of Nature; and naturalists may well feel grateful that he occasionally used his marvellous gift to describe in verse the pheno-

mena which they — equally susceptible to the beauty of Nature's wonders, but tongue-tied—watch with such loving enthusiasm.

There could scarcely be a greater contrast than that which exists between the perfect dragon-fly, with its brilliant colours and active flight, and the grovelling little monster from which it is derived, living its sordid life in the slime of a malodorous ditch. It would be difficult to find a creature which for sheer hideousness could match the early stage or larva of a dragon-fly. Its colour is a dingy gray, a hue which resembles so much that of the muddy bottom of the ditch that the beast is almost invisible until it begins to move. This protective colouration is, of course, of immense service, as it screens the animal from the observation of enemies and victims alike.

The body of the larva is divided into three parts—head, thorax, and abdomen. The head carries the 'feelers,' a pair of prominent eyes, and a most formidable system of jaws. On the thorax are fixed the six long, sprawling legs. The abdomen is distinctly subdivided into rings like those of the hinder part of a lobster's body.

The larva of one family of dragon-flies has three delicate plates attached to the end of its tail. These plates are gills, and are the organs by which the animal breathes. The whole body is clad in a sort of horny shell, which is a veritable suit of armour.

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The larva is incapable of active movement, but a tireless vigilance enables it to stalk successfully the most nimble prey. The head of one species is quite suggestive of that of a cat, and there is something truly feline in the manner in which it lies perdu beneath the shade of a water-weed, or half-buried in the mud which it so closely resembles, stealthily awaiting the approach of its victim.

As the unsuspecting tadpole swims lazily within striking distance, like lightning out shoots a pair of murderous pincers, and the wriggling but helpless prey is conveyed to the mouth, to be leisurely devoured. This terrible paw, with its terminal pincers, is a very characteristic feature of the dragon-fly larva. The end of the weapon is carried, when enot in use, in front of the face, and completely hides the jaws which are used for chewing. It is known as the mask, and is borne upon a jointed arm, which is fixed under the animal's chin.

When the structure is closed, the hinge of the arm points backward between the legs, and the creature looks the type of stolid virtue. The larva is, however, perhaps the fiercest inhabitant of the ditch, and woe betide the succulent adventurer who is seized in the ruthless grip of the toothed jaws when the mask is thrown off.

Let us now turn to the breathing apparatus of this tyrant of the waters. Like every other living thing, a dragon-fly larva can only carry on its life-activities when it can obtain a due supply of oxygen. Every movement of the body, legs, or mask uses up a certain quantity of oxygen and produces a poisonous gas called carbon dioxide. The oxygen must be renewed and the carbon dioxide must be got rid of, or the larva will sicken and die. The manner in which this is carried out is perhaps the most interesting feature of the animal's life-history.

I have already mentioned that the larva of one family of dragon-flies (the family rejoices in the impressive appellation of Agrionidæ) carries at [All Rights Reserved.]

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the end of its tail three delicate leaf-like plates, the tracheal gills. When the gills are examined by means of the microscope they are seen to be made up almost wholly of a fine meshwork of tiny air-tubes. So delicate are the gills that the air in these little tubes is only separated from the water of the pond or ditch by a membrane of excessive thinness.

The water of the pond always contains air dissolved in it, and an interchange is constantly taking place between the vitiated gas contained in the delicate air-tubes of the filmy gills and the life-giving dissolved air of the water. Now, the little air-tubes of the gills are in communication with a very perfect system of pipes which ramify throughout the whole of the larva's body; and thus it comes about that every organ, however remote from the tail, is constantly being

supplied with fresh oxygen.

It is only the aristocratic Agrionidae, however, that possess these tracheal gills. The other families must perforce obtain their oxygen in some other manner. If one of these commoner larvæ be touched, it will be seen to move away from the annoyance with a sudden dart forward, although no propelling force can be distinguished. As a matter of fact the impulse comes from the sudden ejection of water from the end of the intestine. This terminal portion of the digestive tube is thrown into a number of folds, which increase its surface enormously. As the folds contain in their walls a multitude of fine airtubes, gaseous interchange can as readily take place here as in the leaf-like external gills of the Agricuidæ. All that is necessary is that the water shall be constantly changed, and this is effected by a complicated system of muscles. The abdomen can be seen to rhythmically dilate and contract. When it dilates, the cavity of the intestine increases, and water flows in. Then the muscles contract, and the diminution of the space causes the expulsion of the water. Thus the change of the water bathing the air-tubes, which the Agrionidæ effect by wagging their tails, is brought about in other families by the action of the wall of the intestine as suction-pump and force-pump alternately. The alternate sucking in and driving out of the water are as truly inspiration and expiration respectively as the similar processes by which a man renews the air of his lungs. The air-tubes which permeate the intestinal folds are connected with the general system of air-tubes of the body in the same way as are those of the Agricular gill-plates.

In this manner does the young dragon-fly larva spend his days. In the meantime he is growing larger and larger, and therefore finds it necessary to periodically east off his old suit of armour, and grow another one more in accordance with his ampler dimensions. Tiny wing-rudiments begin to make their appearance on his back, and a growing restlessness and irritability indicate the

impending crisis of his life. He no longer breathes dissolved air only, but frequently rises to the surface, and takes in the stimulating oxygen direct from the atmosphere by means of a series of tiny mouths which have opened along the sides of his body. Whilst he is actually submerged these openings are, of course, of no use, and the larva relies upon his gills, caudal or rectal according to his social position.

At length the critical hour approaches, and the larva leaves the water for ever. He betakes himself to the shore, and clasping a friendly stem or branch, awaits his transformation. When he is firmly fixed, the larval skin splits down the back. of the thorax, and the split extends forward until the head and thorax can be completely withdrawn from their sheaths. Then the animal bends back his body and draws his six legs out of their cases. The unprotected limbs are at first quite soft, and far too flexible to be of much use. The animal therefore rests from his labours until the legs are somewhat hardened. When the joints are strong enough for the final effort—and this strengthening process may last for nearly half-an-hour—the beast firmly fixes his feet upon the thoracic part of the larval skin, and, with a final mighty pull, completely withdraws his abdomen.

The famous Réaumur has given such an interesting description of what follows that I should like to quote it here:

'Though the dragon-fly was now free, it had a very different appearance from those which range the fields. It seemed deformed; the abdomen, though longer than the sheath from which it had issued, had not yet acquired its full length. The wings seemed little larger than when they were enclosed in their sheaths. They were turned edgewise, laid side by side, and folded up like a fan or like a leaf in the bud. Not only were they folded along their length, but also transversely. The wings expanded so rapidly that it was difficult to get a faithful drawing made of them. At this time the fly carefully avoided spreading his wings, for though they afterwards become firm as sheets of talc, they are at present soft as wet paper. It is important to avoid the slightest derangement, or even contact with one another. The abdomen is carefully bent into such a position as to avoid touching them. As the wings expand we can see the veins spreading farther and farther apart, and the folds becoming effaced. The expansion is apparently due to the injection of liquid into the veins. . . . More than two hours are often necessary before the wings can be spread out horizontally, and two or three hours more are required before they are able to bear the weight of the body. All the time that the wings are expanding the abdomen is being gradually prolonged.'

It is quite evident that the insect, during the transformation, is the very type of timorous help-

lessness, and the savage younger larvæ are said to sometimes leave the water and dine upon the juicy probationer. Critical indeed is the time, for any injury received at this period is certainly permanent, if not fatal.

Although such an enormous change has taken place in its external features, the animal has lost none of its native ferocity, and the brightly-coloured fly, darting hither and thither in the sunshine, preys as pitilessly upon its insect contemporaries as in its youth it dominated the pond. Its powerful wings and keen sight render it as formidable in the air as its terrible mask did in the water, and the gaily fluttering butterfly finds a short shrift if it carelessly invades the hunting-ground of its merciless foe. One by one the beautiful wings are shorn off, and the body is speedily devoured.

No one could fail to be struck with the singularly perfect adaptation of the insect's structure to a life of aerial piracy. The four wings are large, and, in proportion to their weight, enormously strong. Each is supported by a wonderfully-arranged network of slender ribs, which give the necessary rigidity to the thin, transparent membrane forming its basis. The muscles by which the wings are moved are massive and powerful, and are so arranged among themselves that the animal is capable of steering

its course with an unerring accuracy which any bird might envy. In this power it is largely aided by a marvellous keenness of sight; for, in addition to the two great, gorgeously-coloured compound eyes which make up so much of the head, the insect possesses three smaller 'simple' eyes, making five eyes in all. The prey when overtaken is seized and devoured by means of powerful, sharply-toothed jaws.

An animal which lives such an active life naturally requires a very perfect breathing apparatus, and this is amply provided by a system of holes on the sides of the body which open into an elaborate network of air-tubes, supplying every part of the system. The air in these tubes is constantly renewed by the regular compression and dilatation of the body by special muscles.

The dragon-fly also finds time for domestic duties, and its long abdomen is of service in enabling it to deposit its eggs below the surface of the pond without actually entering the water.

In the fullness of time the eggs hatch, and give rise to another generation of larvæ as hideous and savage as the last. Overhead, the winged insect disports itself merrily in the sun, until Nemesis overtakes it at last, and it provides a delectable morsel for one of the birds which alone dispute with it the empire of the air.

JOHN BURNET OF BARNS.

CHAPTER XXXI.--I FALL IN WITH STRANGE FRIENDS.



LAY there, still with fright and anxiety, while the wind roared around my hiding-place, and the noise of the horses' feet came to my ears. My first thought was to rush out and meet my pursuers, engage

the company, and get the letter back by force. But a moment's reflection convinced me that this was equal to rushing on my death. There was nothing for it but to bide where I was, and pray that I might not be discovered.

The noise grew louder, and the harsh voices of the men echoed in the little glen. I lay sweating with fear, and I know not what foreboding, as I heard the clatter of hoofs among the slates, and the heavy tread of those who had dismounted and were searching every tuft of heather. I know not to this day how I escaped. It may be that their eyes were blinded with mist and rain; it may be that my hiding-place was securer than I thought, for God knows I had no time to choose it; it may be that their search was but perfunctory, since they had got the letter; it may be that they thought in their hearts that I had escaped over the back of Caerdon, and searched only to satisfy their leader. At any rate, in a little all was still, save for the sound of retreating voices, and with vast caution and great stiffness of body I drew myself from the hole.

I have rarely felt more utterly helpless and downcast. I had saved my skin, but only by a hair-breadth, and in the saving of it I had put the match to my fortunes. For that luckless letter gave the man into whose hands it might fall a clue to Marjory's whereabouts. It is true that the thing was slight, but still it was there, and 'twas but a matter of time till it was unrayelled. All was up with me. Now that I was thus isolated on Caerdon and the far western ridges of the Tweedside hills, I could have little hope of getting free; for to return to safety I must cross either Holmes Water, which was guarded like a street, or the lower Tweed, which, apart from the fact that it was in roaring flood, could no more be passed by me than the gates of Edinburgh. But I give my word it was not this that vexed me; nay, I looked forward to danger, even to capture, with something akin to hope. But the gnawing anxiety gripped me by the throat that once more my poor lass would be exposed to the amenities of my cousin, and her easy, quiet life at Smitwood shattered for ever. An unreasoning fit of rage took me, and I dashed my foot on the heather in my hopeless vexation. I cursed every soldier, and wished for Gilbert the blackest torments which my heart could conjure.

But rage at the best is vain, and I soon ceased. It was, indeed, high time that I should be bestirring myself. I could not stay where I was, for, in addition to being without food or decent shelter, I was there on the very confines of the most dangerous country. Not two miles to the north from the place where I lay the hills ceased, and the low-lying central moorlands succeeded, which, as being a great haunt of the more virulent Whigs, were watched by many bands of dragoons. If my life were to be saved I must get back once more to the wild heights of the upper Tweed.

I climbed the gully, and keeping lower down the hill, made for the mountain named Coulter Fell, which is adjacent to Caerdon.

When I reached the head of the ridge I thought that the way was clear before me, and that I had outdistanced my pursuers. I stood up boldly on the summit, and looked down on the Holmes Water head. The next minute I had flung myself flat again, and was hastening to retrace my steps. For this was what I saw: all up the stream at irregular intervals dragoons were beating the heather in their quest for me. Clearly they thought that I had made for the low ground. Clearly, also, there was no hope of escape in that quarter.

With a heavy heart I held along the bald face of the great Coulter Fell. I know no more heartless mountain on earth than that great black scarp, which on that day flung its head far up into the mist. The storm, if anything, had increased in fury. Every now and then there came a burst of sharp hail, and I was fain to shelter for a moment by lying on the earth. Very circumspectly I went, for I knew not when, through the wall of mist, a gleam of buff coats or steel might neet me. In such a fashion, half-creeping, half-running, I made my way down the hills which flank the Coulter Water, and came at length to the range of low hills which look down upon Biggar and the lowlands of Clyde.

I struggled to the top and looked over into the misty haughs. The day was thick, yet not so thick that I could not see from this little elevation the plain features of the land below. I saw the tall trees of Coulter House, and the gray walls and smoking chimneys. Beyond was the road, thick with mud, and with scarce a traveller. All seemed quiet, and as I looked a wild plan came into my head. Why should I not go through the very den of the lion? What hindered me from going down by the marsh of Biggar and the woods of Rachan, and thence to my hiding-place? It was the high-roads that were unwatched in these days, and the byways which had each their sentinel.

But as I looked again the plan passed from my mind; for there, below, just issuing from the gateway of Coulter House, I saw a man on horseback, and another, and still another. I needed no more. A glance was sufficient to tell me their character and purport. Gilbert, verily, had used his brains to better advantage than I had ever dreamed of. He had fairly outwitted me, and the three airts of north and south and west were closed against me.

There still remained the east, and thither I turned. I was shut in on a triangle of hill and moorland, some three miles in length and two in breadth. At the east was the spur of hill at the foot of the Holmes Water, and above the house of Rachan. If I went thither I might succeed in crossing the breadth of the valley and win to the higher hills.

I do not very well remember how I crossed the Kilbucho glen, and stumbled through the maze of little streams and sheep-drains which covers all the place. At a place called Blendewing I lay down on my face and drank pints of water from the burn—a foolish action, which in my present condition was like to prove dangerous. In the pinewood at the back of the sheiling I laid me down for a little to rest, and when once more I forced myself to go on I was as stiff as a ship's figure-head. In this state I climbed the little hills which line the burn, and came to the limit of the range above the place called Whiteslade.

It was now about two o'clock in the afternoon, and the storm, so far from abating, grew every moment in fierceness. I began to go hot and cold all over alternately, and the mist-covered hills were all blurred to my sight like a boy's slate. Now, by Heaven! thought I, things are coming at last to a crisis. I shall either die in a boghole, or fall into my cousin's hands before this day is over. A strange perverted joy took possession of me. I had nothing now to lose. My fortunes were so low that they could sink no farther. I had no cause to dread either soldier or weather. And then my poor silly head began to whirl, and I lost all power of anticipation.

To this day I do not know how I crossed the foot of the Holmes valley—for this was what I did. The place was watched most jealously, for Holmes Mill was there, and the junction of the roads to the upper Tweed and the moors of Clyde. But the thing was achieved; and my next clear remembrance is one of crawling painfully among the low birk-trees and cliffs on the far side of the Wormel. My knees and hands were bleeding, and I had a pain in my head so terrible that I forgot all other troubles in this supreme one.

It was now drawing towards evening. The gray rain-clouds had become darker, and the shadows crept over the sodden hills. All the world was desert to me, where there was no shelter. Dawyck and Barns were in the hands of the enemy. The cave of the Cor Water was no more. I had scarce strength to reach my old hiding-place in the hags above Scrape, and if I did get there I had not the power to make it habitable. A

gravelled and sanded couch with a heathery roof is pleasant enough in the dry weather, but in winter it is no better than a bog-hole.

Nevertheless I slid down the hill as best I could, and set myself to crossing the valley. It was half-filled with water-pools which the flood had left, and at the far side I saw the red. raging stream of Tweed. I remember wondering without interest whether I should ever wade over or drown there. It was a matter of little moment to me. The Fates had no further power to vex me.

But ere I reached the hill-foot I saw something which made me pause, reckless though I had come to be. On the one hand there was a glimpse of men coming up the valley-mounted men, riding orderly as in a troop. On the other I saw scattered soldiers dispersing over the haughland. The thought was borne in upon me that I was cut off at last from all hope of escape. I received the tidings with no fear, scarcely with surprise. My sickness had so much got the better of me that though the heavens had opened I would not have turned my head to them. But I still staggered on, blindly, nervelessly, wondering in my heart how long I would keep on my feet.

But now in the little hollow I saw something before me, a glimpse of light, and faces lit by the glow. I felt instinctively the near presence of men. Stumbling towards it I went, groping my way as if I were blindfold. Then some great darkness came over my brain, and I sank on the

A HOLIDAY ON LOCHTAYSIDE.

By Rev. Hugh Macmillan, D.D., LL.D., F.R.S.E.



SPENT my summer holidays in a recent year at a farmhouse near the head of Loch Tay. It is a charming spot, situated where two large burns -that rise, the one from the corrie behind Mael Ghlas, and the other

from Loch Larig, at the summit of the Glenlyon pass-flow down the declivity in many a foaming waterfall to the loch a short distance from each other. Several huge plane - trees of great age form an avenue leading from the high-road almost to the door. These ancestral trees, and the scanty remains of a baronial castle near at hand, indicate that the place must once have been of considerable importance.

The view in all directions is magnificent. Westward, over a series of undulating heights, rises up the lofty cone of Ben More, filling all the horizon in that direction. Below, to the south, the smooth, dark waters of Loch Tay occupy the long trench-like hollow between the hills; and beyond, on the other side, the mountain slopes climb up to the sky-line adorned with fertile pastures and sunny copses. The shores of the loch are fringed with woods; and the waterchannels that seam the sides of the hills have lines of shrubby vegetation veiling them from the summer heat and marking out their course. Here and there on some lonely knoll, or beside a secluded burn, are the dismantled ruins of once flourishing croft-houses and hamlets, from which the inhabitants were driven out to give place to sheep-holdings or larger farms. The sight of these relics of the past fills one with sadness, and raises perplexing questions regarding the rights and duties of property. But whether the expulsion of the hardy and honest natives, whose forefathers had tilled the ground from time immemorial, was justifiable or not, it is at least

certain that it has turned out for the best; for they all have thriven wonderfully in those Canadian or Australian settlements to which they betook themselves, and to which they gave, with a pathetic patriotism, the old beloved names of home. Here and there the monotony of the green pastures is diversified by large patches of crimson heather, shining in the afternoon light as if the sunset glow had settled permanently upon them. At the back of the house the ground slopes up gradually to the lofty summit of Mael Ghlas, with a corner of the highest part of Ben Lawers standing out in darker hue behind the green shoulders of the hill. This view gives an alpine appearance to the landscape; and when veiled in dense clouds, the crags and corries under the dark fringes of mist look sombre in the extreme, and lead the imagination up to an unknown Cimmerian realm of storm and mystery.

Portions of old querns and two barley mortars lying neglected near the kitchen door of the farmhouse set me thinking of the primitive agriculture of former times in this part of the Highlands. It certainly must have been of the rudest kind. The people had not appliances for the removal of the great boulders which cumbered the ground, and they simply turned up the soil round them in patches here and there. The marshes, also, were only partially drained, and the lower slopes of the hills were rendered impassable by the overflowing waters of the streams. In these circumstances the farmers sought the higher grounds, where the soil was drier, and the line of boulders which marked the height of the old glacial stream fell short of the limits of cultivation, and there were fewer encumbrances in the shape of wood and stone to remove from the soil. Accordingly we

find most of the old tillage on the uplands. But there were other obstacles to contend with there. The heather, being native to the soil, and best adapted to the situation, was a more formidable weed to keep at bay than the common weeds of the fields at the base of the hills, and began at once to encroach upon the green enclosure during the slightest relaxation of toil and care. Owing to the latitude and altitude, the corn and barley did not ripen till a late period, and had to encounter the storms and floods which usually occurred at the close of autumn. And not once, but many times during a crofter's lease, must have happened what took place on one occasion on the minister's glebe in the far north. The minister's man, shearing the corn in the beginning of October in an exceptionally favourable season, was asked by an English tourist passing by if the soil in the neighbourhood was good. The minister's man replied that the stranger could judge for himself; for this year they had two crops on that very field. The stranger went away considerably mystified; but the true explanation was that the previous crop had not been gathered in till January, and now in October of the same year they were reaping another crop.

Lochtayside has always been more a pastoral than an agricultural region. The growth of corn has been subordinate to the raising of sheep and cattle. The mountains are remarkably green to the very top, only a small portion of heather being found here and there, and yield rich natural grass for the large herds that roam over them. But before the invention of artificial food and the growth of turnips, when the cattle all the year round fed upon the natural pastures, there was no provision made for their upkeep when these pastures were hid under several feet of snow. We read how, in these circumstances, the cattle that were sheltered in the byres were reduced almost to starvation, and yielded hardly any milk. All that is now changed. The population of the district, greatly thinned by emigration to our large cities and to the Colonies, are able to maintain themselves in comfort; and nowhere can finer fields of potatoes be seen than on the slopes of these hills, finding there a soil and situation similar to the conditions of their native country, and therefore most conducive to their welfare in a foreign land.

I spent a good deal of my holiday-time in exploring the numerous traces which the old population of the district had left behind; for the pathos of a vanished race seemed to breathe over every height and hollow. I found the task, though melancholy, exceedingly suggestive. I wandered over the dim paths which they had made, and which were now almost obliterated by the footsteps of time. I lingered beside the lonely ruins of the houses where they lived, and where the nettle grew luxuriantly round the cold hearth-

stone, and the solitary rowan that overshadowed them had failed to charm away the witchcraft of change and death that comes some time or other to every human family. I followed up the rough, winding peat-roads, over broken bridges and quaking marshes, till I stood beside the dark bogs where they used to cut their fuel, and which still showed ineffaceable touches of their sturdy toil, although Nature, with her luxuriant growth of mosses and lichens, strove to bring them back to her universal bosom. But what interested me most were the remains of the hoary sheilings, which I found scattered over the uplands in considerable numbers. There was one cluster especially that attracted my notice on account of its large size and apparently great age. I found these sheilings in the corrie of Ben Lawers, following up the old zigzag peat-track on the western bank of the Carie Burn till the first plateau is reached, where the people used to make peats. Here was a curious assemblage of circular foundations made of stones and turf, and looking wonderfully green in contrast with the dark bogs around them—an oasis in the wilderness. All tradition of these sheilings has disappeared in the district; and several hundreds of years must therefore have elapsed since they had been in active use.

I used to sit within one of these broken-down huts—often when the shades of evening were beginning to fall, and to cast the brown hue over the landscape which is so conducive to meditation—and try to picture the curious state of things which they so vividly recalled. What an idyllic mode of life that residence in the mountain sheiling during the summer months of long ago must have been! It has disappeared from Scotland for nearly a hundred years; but it still survives in Norway and Switzerland. In the saeter of the Norwegian fjelds and in the châlet of the Swiss Alps we have a picture of what the old life of the Scotch sheiling must have been.

I have said that the cultivation of the Highlands was in former times more on the heights than in the valleys, in places that are now overgrown with heather on the moorlands. But, higher than the highest line of corn-growing fields, there are spots among the hills where a carpet of the greenest and smoothest turf is laid among the brown heather and the black peat-moss. Some bright knolls, covered with the most compact grass, rise above the quaking marshes; and on the sheltered side of one of these green mounds, where the ground is especially dry and hard, the rude sheiling was built of the rough stones lying about, without any cement, and roofed with branches of trees and bits of sod. It had no comforts of any kind, and barely afforded shelter from the elements. The inmates, especially when the weather was severe, had to rough it in a way that would have astonished our modern tramps and lowest poor. They lived an almost entirely open-air life, constantly engaged in watching their cattle and in milking them at suitable times, and storing the milk and converting it into butter and cheese. Beside the sheiling there was always a little rill that flowed past all day with its manifold voices, as it rippled over its irregular bed or fell over a barrier rock in lines of white foam into swirling brown pools, and all night sang its quiet tune, while the moonlight whitened the rude stones under whose shelter human hearts were dreaming. The water of the streamlet was necessary not only for drinking, but also for washing the milk-dishes and preparing the butter. Around were patches of verdure scattered over the stony hillsides or over the rugged corries; and there the dun-coloured cows browsed diligently all day, and obediently came to be relieved of their milky spoil at the call of the maidens.

To these sheilings the grown-up women of the farm retired about the beginning of June each, year, and remained in this seclusion among the hills, far from the dwellings of their nearest neighbours, till the end of August or September, when the labours of the harvest demanded their help, and when the shortening days and the decaying verdure reminded them of the necessity of returning to the farm in the low grounds. But the maidens were not so solitary as one might suppose. Young men, their friends and sweethearts, came up from the farms from time to time to cheer them when their own work was over. And the romance of love in such novel circumstances shed a halo over the passing hours. The pathetic song of the 'Flowers of the Forest' alludes to the courting of the lads and lasses among the green knowes around the mountain sheiling. The maidens, when left alone, often beguiled the time in singing; and many a beautiful Gaelic song describes the charm of this simple pastoral life. One of the oldest and most popular of the Highland songs is a sheiling song called 'Crodh Callein,' or 'Collin's Cattle,' whose music afterwards developed into the plaintive tune of 'Lochaber no more.' It is curious how this emigrant's farewell of Scotland, which breathes the purest love of country, should have grown out of a cow-song like the 'Ranz des Vaches' of Switzerland. The song of 'Crodh Callein' marks the transition from the huntsman's life to the pastoral and agricultural. The first was considered for a long time the nobler and manlier mode of life; and it was with reluctance that the roving huntsman settled down to the tame pursuits of the shepherd and farmer. By-and-by, as the old mode of life receded into the past, and the new became more common and confirmed, a well-stocked farm and a herd of milk-giving cattle browsing around the sheiling were thought far more of than the huntsman's skill and daring and the chance products of the chase. The song in question indicates the beginning of this preference; for the cattle of Collin, who was a huntsman, were in reality the wild deer of the mountain, and they were cunningly alluded to under figures of speech which changed their identity, and made them seem the cattle of the byre and the sheiling, as if only under this semblance were they of any consideration.

It not infrequently happened that what was called a creach took place in some lonely mountain sheiling, and the cattle were carried away by marauders of another clan, to the great mortification and sorrow of the helpless maidens in charge. There is a story of such a creach that happened about two hundred and fifty years ago, and gave rise to another popular Highland song. The men of Keppoch at that time came down in force upon the defenceless sheiling of Cashlie near the head of Glenlyon, in the neighbourhood of where I was staying. They carried away all the cattle and the two dairymaids who were in charge of them. The Glenlyon men, made aware of the raid, pursued them as they were marching northwards to their home, and, coming upon them at the west end of the glen, a desperate fight ensued, in which the reavers were defeated with great loss. During the combat one of the dairymaids was slain; and the other was brought back by the victors to Meggerney Castle, where she composed the touching song descriptive of her feelings on the harrowing occasion. The name of this musical Highland maid has not survived, although that of her companion who was killed has been handed down to us and associated with a cairn still standing on the scene of the tragedy, called Carn Mic Cridhe, or Macric's Cairn. Memories of love and war are connected with the gray ruins of the sheilings; and the names of some of them recall many a stirring deed. The effect of this mode of life in developing the musical and poetic instincts of the people is remarkable. It would furnish many a picturesque theme for the romance-writer. In this field there is hid a rich treasure of human story waiting to be appropriated by some original genius-as a new kind of kailyard literature. On the shoulders and in the corrie of Mael Ghlas, and up in the gloomy ravine of Larich-an-Lochan, there are ruins of numerous sheilings, bearing witness to a large population that once inhabited this part of Lochtayside. In the wild recesses of Creag-an-Lochan, the growth of the nettle around shapeless heaps of mossy stones still testifies to human occupation, and shows how, as in Switzerland, the wildest parts of the Scottish mountains were not left to waste their scanty crops of spontaneous grass uneaten by the cattle of the dairymaid.

Talking one day with my landlord, the farmer, whose own wife was seriously ill at the time, about the sanitary condition of the locality, he made the shrewd remark that in olden times the country people were much more healthy than they are now; and he attributed the cause to the variety which the pursuits of the summer-sheiling gave to their life.

They had in the transition from the low grounds to the heights of the mountains a complete change of air and scene; and even the food was, if possible. plainer, and the mode of life was brought back to the primitive simplicity of Nature. Whereas at the present day the occupations of the farmer have no such complete transitions. They are continuously carried on in the same place from year's end to year's end without any change or break. And even the summer holidays in the south, which are made possible by the near presence of the railway, are no real compensation for the loss of the sheiling life. For such holidays are more artificial than the farmer's ordinary existence, and bring the fever and the worry of the great world to make his pulse beat faster, instead of laying upon his wearied energies the calm, cool hand of Nature in ancient repose, like a mother's blessing.

What a change has come over the Highlands in recent years! In olden times it was the Highlands that invaded the Lowlands, and carried off much spoil and blackmail. But now the condition of things is reversed, and it is the Lowlands that are invading the Highlands every year and paying down good money of the realm for the sight of purple mountain heights, and for the honey breath of crimson heather, and the fragrance of fir-forests and bog-myrtle. Every spot, even the loneliest and most inaccessible, is crowded with summer visitors from the south; and instead of the soft accents of the Gael you hear the high tones of Ludgate Hill and Bedford Street. We read of the old Celtic saints wandering over the scantily populated districts of the north in search of a solitude in which no hermit had built his cell, and being frustrated in their efforts; for in every glen and island there was some holy man already located, leading a life 'by heaven too much oppressed.' But still more vain would be a search nowadays for some spot in which one could spend a summer holiday apart from all associations of one's ordinary life, 'the world forgetting, by the world forgot.'

Every one feels the craving for change. Life is

so busy and conventional that there is an ardent desire to go back for a few days or weeks each year to the quiet simplicity of Nature. Dr Louis Robinson, in a recent article in the National Review, endeavours to show why it is that change of air does us so much good. He traces the reason back to primitive habits and ancestral instincts. Mankind have passed through three stages of lifethe hunting, the pastoral, and the agricultural. For countless generations our ancestors were obliged to roam about in search of the game on which they lived, and it is only within a comparatively short period that their descendants have settled down to agricultural pursuits. Dr Robinson holds that the old vagrant habits of the nomadic stage of life through which we have passed have become a part of our physical inheritance, and that, therefore, the confinement of our large cities and stated occupations, being a violence to this second nature, is apt to develop evil consequences, especially when for some reason or other the general vitality has been lowered; and therefore a renewal of the vagrant conditions to which our constitution was originally adapted might be expected to contribute to the recovery of a good state of health. This reason may seem far-fetched; but it is undoubtedly true that we have all, from the highest to the lowest, a strong spice of the savage in our nature: and a longing at times comes over us to break loose from the restraints of civilisation and revel in the wild freedom of our barbarian ancestors. The grouse-shooting fever may be one of the periodical ebullitions of the original temperament; and the deerstalker's enthusiasm every autumn seems to bring back the hunting stage of primitive life. But to all of us the annual reversion to simple, hardy life is a gratification which is felt all the more keenly the more that ordinary life is artificial and restrained. And though every one cannot on occasions return to the hunting stage of life like our wealthy classes-for, strange to say, it now costs too much-yet we can all return to the nearest approximation to the pastoral stage, and experience in some degree the benefits of the old sheiling-life among the mountains.

FRIDA PETERSEN'S LOVER.

By CHARLES EDWARDES.

IN TWO PARTS .- PART I.



HEY were bringing old Petersen from his farm in Siov to lay him in the Thorshavn churchyard.

'Easy, boys,' exclaimed the handsome young man who sat in the stern of the boat, side by side with

Frida, the dead man's daughter. They round the basalt rocks which hedge in Thorshavn's little har-

bour: terrible rocks against which no vessel would have a chance in anything like a storm. Then, as they swept round into the haven, the young man's eyes were suddenly caught and his attention held by the imposing form of a British gunboat, with the Union-jack flying at its stern.

'She come in the night,' whispered one of the oarsmen. 'It is for to protect the Shetland and the

Grimsby men off the Iceland waters. The French, they too have a warship; but there will be no trouble. The officers will give themselves dinners and shoot things, and so they will return.'

Frida, pale and grief-worn though she was, seemed almost as much interested in the fine vessel as was her companion; but only for a moment. A gun was fired from the tiny fort on the end of the basaltic headland. Then they heard the tiny tinkle of the church bell—the church itself white and tall above the other black little houses of the town, saved from absolute gloominess only by the green turf on their gabled roofs. This was in honour of old Petersen. He had been a worthy Faroeman, known and respected by all the eleven thousand inhabitants of the isles.

Hearing these sounds, the girl again covered her pale face with her hands, and let her long yellow hair fall to the front. As she bowed forward in her distress the yellow hair caught the sunshine, so that it looked like spun gold. It certainly contrasted wondrously with the plain black coffin which stretched from her feet forward. The coffin bore neither flowers nor covering: only the words, 'Jens Petersen, aged 69.' It was ugly and forbidding in its sombre nakedness. But it held nearly all in the world that Frida cared for.

The young man put his arm round the girl's waist and gazed at her with genuine sympathy, and more than sympathy. Then he whispered, so that none else could hear his words:

'Sweetheart, bear thyself up; it will soon be over. The old man is happy; and remember he said almost with his last breath that he wished you not to be unhappy about losing him.'

This comfort seemed to have much effect upon Frida. She raised her head and looked at her companion with her placid, tear-stained blue eyes. Her restraint before the four stout peasants in blue mob-caps was pathetic in its childishness. Yet why should she think of dissembling? Had not the four oarsmen been born and bred on her father's land, worked and fished for and been tended by him alone? And did not they and all Kollefjord know full well that young Graham, though not a Faroeman, was as good as plighted to her?

On arriving at the pier quite two hundred people followed the corpse to the church, and afterwards to the bare and even repellent little God's-acre among the heather and rocks outside the town. He had been an uncommon sort of Faroeman. His daughter was more beautiful by far than most Faroe girls; and the inclusion of young Graham in his household some three years back had seemed so very audacious a step, only justified, as it happened, by the young stranger's exceptional qualities both of person and ability.

Graham and Frida were, of course, the chief mourners. And, to tell the truth, as they walked arm-in-arm, the scores of women and girls, with black silk handkerchiefs over their heads, paid much more attention to these two than to the service or the solemn lesson which the scene ought presumably to have taught them.

Douglas Graham was six feet high and well made. He was what the Faroese call 'a fine man;' yet there was that in his face which, though strongly inspiring confidence (affection the girls would have said), hinted at certain experiences which had left their mark on his mind.

But when the service was ending and the pastor had cast his three shovelfuls of earth into the grave, a knot of British sailors strolled into the cemetery, with a petty officer or two among them. They were reverent enough, yet they immediately distracted the attention of most of the company. A ray of sunlight stole through the fog immediately over the cemetery and shone upon the gold hatband of one of the man-of-war's men. One of these latter had barely time to murmur to his comrade, 'That's a pretty girl,' indicating Frida, when the funeral group broke up. This was the moment the poor girl most dreaded. She trembled on Douglas Graham's arm as she looked her last at the forbidding black box (made and painted at home) which held her father.

'Sweetheart,' whispered Douglas when he had again wrapped up Frida in the warm shawls of her own knitting, and in other respects made her as comfortable as possible, 'now I have you all to myself I will be father, and husband, and brother to you, please God!'

The girl could only sob for reply; but she thrust her little hand between his two sinewy brown ones when they were again out in the harbour; and thus hand-in-hand they made the return voyage. The sea was again all a-sparkle with sunlight, and the capricious Faroe fog clung only to the sides of the distant mountain of Naalsoe.

Meanwhile the men ashore from her Majesty's gunboat Goshawk had divided into two groups. Of the one group one of the sailors had sauntered, or rather 'slithered' (so he said), down the greasy, malodorous steps cut in the rock which led them into the heart of poor little Thorshavn town.

Of the other group a petty officer named Porteous was the leading spirit. Hardly had Porteous come into the cemetery than something seemed to affect him strongly. He stared at Douglas Graham with might and main, and only latterly at Frida. It was difficult to say which of the two moved him the more.

Afterwards, however, he signified his intention of returning at once to the ship. This was when he had seen the mortuary boat rowed off to the north.

'Jack,' he said to one of the men, 'I mean to follow that little craft, and so, if you've no particular objection, we'll just get leave and chase 'em.'

The others would have preferred to stay in Thorshavn, but Nick Porteous was not a man to be opposed in anything. Soon, therefore, they were once more alongside the gunboat, and then pulled off in a northerly direction. The requisite permission had easily been obtained. The barometer was consoling, and the Goshawk had been at sea so long that it would have been hard lines to refuse this one day's pleasuring, especially to so valuable a man as Porteous.

'Pull hard, my lads,' said this person when he had seated himself and taken the tiller in hand. 'They've got a good start, but you'll want flogging if you can't catch these Johnnies with straw beards before they get ashore.'

One of Porteous's intimates began jesting with him about this petticoat-chase, as he called it. But Porteous was not in a humour for fun of this kind, and he showed it.

'I don't mind telling you, Jim,' he said, 'that I'm a bit curious about you long-legged fellow who was alongside the girl at the grave. If I didn't know him at Kirkwall a few years back, I'm very much mistaken. If he's the man, then he'd better look out for squalls, for I've as tough a bone to pick with him as he'll have in his lifetime.'

The other laughed. 'If that's so, Nick,' he said, 'he can have all the picking of it with you. I'd not like to be in his shoes—queer shoes they wear up here, don't they?'

'There's this, though,' said Porteous. 'I don't want to let on that I'm the man I am till I've got to know more about him. I'm much changed since then, what with beard and all—and especially with this beauty-mark—for which he's responsible.'

Porteous touched a great sear running from his left eye to his beard. It was an ugly sear, but not half so ugly as the expression in his face.

'Now then, there, no loafing—pull, you fellows!' he cried the next moment.

But scarcely had half-an-hour passed ere Porteous and the others were fain to confess that the Faroemen were as clever with their oars as themselves. The boat with Douglas and Frida in it had turned into Kollefjord, while the Goshawk's boat was quite two miles distant from the head of the fjord.

try and scale it. But Porteous straightway checked their enthusiasm in this matter.

'Not this time, my lads,' he said. 'We'll be back here in a month. Then we'll have a rattling fine picnic ashore, and it'll have to be a devilish tough mountain if we can't climb it then. What you have to do now is just to samter about here, while I go off up the shore a bit.'

Porteous meanwhile had found guidance towards Petersen's farm. High up among the overhanging rocks could be seen the figure of a man. With his sharp vision Porteous had long ago determined that this was Douglas Graham. Had he doubted it he would have been less eager to steal a march on him.

In spite of the sad circumstances of the day, the maid-servant asked the officer into the house immediately. To give him his due, Porteous felt that he was a brute. But that did not deter him from his intention to play a brute's part.

Frida came to him at length, pale and listless.

'Be so good,' she explained at once, 'as to excuse me from welcoming you. I have to-day buried my dear father. But Marta shall provide refreshment, which you will be so good as to enjoy.'

Porteous was eager in apologising for his intrusion.

'I should not,' he said, 'have come if I had not seen an old acquaintance with you just now in Thorshavn—Douglas Graham, or I'm much mistaken.'

'Oh! do you know Douglas?' eried the girl, clasping her hands.

'I know him well enough to hope that you are not married to him,' said Porteous slowly and emphatically. The ghoul noted with avidity the shadow that flitted upon the girl's face at these words.

'What does that mean?' she asked.

'It means just this. Three years ago Douglas Graham killed a man. He escaped hanging by—coming here, I suppose. That is all. Douglas Graham is a murderer.'

THE FINEST CYCLING ROUTE IN THE WORLD.

By JOHN FOSTER FRASER.



VERY wheelman is nowadays looking afield for new cycling worlds to conquer. The man who suggests a new ride which is pleasant and easy, with not too many hills to climb, which takes him to wonder-

ful places full of historic interest, and through beautiful scenery, and where he need never have any fear of indulging in profanity owing to rain, is regarded somewhat in the light of a public benefactor.

I have no wish to be regarded in that spirit; but as I have ridden over what is undoubtedly the finest cycling route in the world, I think there are others who would care to follow my example. A few years ago such a suggestion would have been useless, for then cycling was a distinctly plebeian amusement, followed by men who had only a month's, or a fortnight's, or less, holiday in the year. But now that bicycles are ridden by folks who belong, as Mr Toole would say, to the 'hupper suckles,' and to whom time is not so much a consideration, there are no doubt hundreds of people who are willing to travel for a good bicycle ride.

The road I have in my mind is in India, and stretches twelve hundred miles from Lahore to Calcutta. It is the famous Grand Trunk Road. Let me explain its nature, though one cannot do so by comparison, for there is no road of five miles in England that is anything like it. It is level; indeed, there is not above a mile the whole distance where even a lady need dismount to walk. Around Battersea Park is supposed to be the easiest little spin in London. The Grand Trunk Road is infinitely superior to Battersea Park. The material with which it is made is called kunker; and if you care to turn that word into concrete, you have an idea of what it is like. It is exceedingly hard, and as smooth as a prepared pavement. There is no dust. When I first got on this road and enjoyed the luxury of easy travelling, I said, 'This is magnificent; but in a little time I suppose it will become gritty and uneven.' I went fifty miles, one hundred miles, two hundred miles, five, six, seven hundred miles, and it was always the same, with not even a small stone to give a jog. Nearly the whole of the way is lined with a double row of majestic trees. The concrete road runs like a long white ribbon down the centre, and along each side are loose-soil tracks, over which the native bullockcarts creak a slow two miles an hour.

With two friends I rode across India during the hottest time of the year, in April and May, and was never seriously inconvenienced by the heat; for, at a pace of fifteen miles an hour, one could always create a draught. In the winter

months, from December till March, thousands of English people go to India sight-seeing. They are rushed in the train from one city to another; they see the fine buildings and a few fine bazaars, but they don't see India as it might be seen. Therefore, I would say to people going to India this coming winter: Take your bicycles with you; and when you get to Lahore abandon the train and ride on your machines the rest of the way to Calcutta. After a short thirty-six miles' run out of Lahore you reach Amritsar, the great Sikh city, with its marvellous Golden Temple and quaint, picturesque scenes; you go on to Umballa, and run down to historic Delhi, with its marble mementoes of the Great Moguls; you reach Agra, and grow poetical under the full moon while sitting before the Taj Mahal, the most bewitching monument in the wide world; you ride through a country reminiscent of the Mutiny to Cawnpore, and, if you like, take a turn off to the left and visit Lucknow; you speed on to Allahabad, and cross the holy river Ganges, and in one day, if you have a mind, reach Benares the sacred, the city of ten thousand temples. Then you drop into Bengal, where you get runs through wild jungle and a land full of nodding palms and rich giant vegetation; for one day you hasten through the coal district of North India, and then you reach the jungle again, where gorgeous-plumed birds whirl in the air, and groups of monkeys spring from bough to bough accompanying you. You rest a night in a little patch of French territory, Chandernagore, in a French hotel, by the side of a lovely boulevard overlooking the broad waters of the Hooghly; and then, after another twenty-five miles, you are in Calcutta, the city of palaces. And besides all these, you have been through thousands of villages; you have actually seen native Indian life, the hooded bullock-carts in which the purdah ladies travel, and the palanquins in which the rich rajahs are carried; you have seen the Hindu in his little wayside temple, and altogether you have got some idea of the physical and picturesque aspects of India.

'Yes,' the reader will say; 'but how about accidents, food, and sleeping accommodation?' Now, I would not advise a cyclist who cannot have a nut screwed without the assistance of a cycle repairer to go on such a journey. But the man who can repair a puncture and attend to the ordinary necessities of a machine need have no fear. I rode the entire distance with but a single puncture. As to the food, there are dâk-bungalows at every twenty or thirty miles along the route. These are government houses built for the accommodation of travellers. At many of them is a cook, though I confess fowl is the staple and eternal dish, of which one soon gets tired. My friends and myself often covered seventy and eighty,

and sometimes a hundred, miles a day; and as for a thousand miles the road is never more than five or six miles from the railway, we usually had dinner and breakfast at one of the many refreshment-rooms, and then carried something in our bags for lunch. Of course we slept at the dâkbungalows. There is just enough discomfort and slight hardship to make the expedition interesting. There are beds, but no mattresses or pillows. But a man who likes to rough it can easily turn his coat into a pillow.

Of course there are those who would like to cycle over this fine road, but want none of the attendant inconveniences. To those there is a plan of travelling in positive luxury. At Lahore they could employ a native servant, speaking English, who could travel each day by train to the afternoon's destination with baskets of food, wine, and the necessary bedding. Everything would be ready

at the dâk-bungalows before the cyclists arrived. At only one part of the route would this be impossible—namely, for some two hundred and fifty miles after leaving Benares, on the way through Bengal. But there are cooks at most of the dâk-bungalows there, and even in out-of-the-way villages I have found shops selling European delicacies.

The climate of India is exquisite during the cold weather. There is never any rain. There is delightful scenery, fine historic cities, and a road which has not its like on the earth. I have cycled in many strange corners of the world; but I will always regard the Grand Trunk Road from Lahore to Calcutta as the paradise of wheelmen. And now to English cyclists with leisure and means, and desiring to spend an enjoyable month, I would say: Go this winter to India and ride those twelve hundred miles.

MURCHISON'S MARCH.

A STORY OF ALASKA.

By HAROLD BINDLOSS, Author of How they took the Olga out, &c.



may interest some to learn that the auriferous wealth of the Yukon region is by no means a new discovery. Gold has long been found in more or less paying quantities throughout the basin of the great

river, and five years ago a party of miners came down with the writer from Alaska, bringing out nearly five hundred ounces. They went up into the wilderness seven in number; but three had laid their bones among the gloomy cañons, and the rest would carry the memory of that journey with them all their lives, they said. Hitherto, however, glacier-ribbed range, snowy pass, and foaming torrent have barred the gates of the northern Eldorado to all but the hardiest. It is also probable that the comparative few fortunate enough to discover the secrets of the hidden placers had reasons of their own for saying little of their success.

The outline of this story was told by a young Englishman, who once made a memorable march through the Alaskan snow, one autumn day when we lay in the shadow of the mighty redwoods above the black rocks guarding the entrance to Vancouver harbour. The wreck of the Beaver, the first steamer to enter the Pacific, lay beneath us, and there was snow upon the range across the sunny inlet, which, the narrator said, brought the scenes back more sharply.

A crackling fire of driftwood blazed among the boulders beside a lonely lake, far away among the snow-crested hills which lie between the Yukon and the Ko-wak rivers.

A cluster of weather-beaten, weary men were

seated about the fire, sucking lazily at their pipes, the red glow lighting up rugged faces that were bronzed by snow-glare as well as sun. They were a characteristic group—free prospectors to the manner born, ruined stock-raisers from the eastern plains, Ottawa lumbermen, and a few restless adventurers whose antecedents it would have been hard to guess. They had foregathered by treacherous ford and lonely pass on their hurried journey south, for winter was closing in unusually early that year, and there was no time to lose if they would reach safe quarters before every defile was choked with snow.

Presently an old miner drew closer in under the lee of a boulder. 'A bitter wind,' he said, 'an' six months dreary winter ahead, onless there's them among you fools enough to follow the Captain's lead.' Then the speaker dropped his voice a little as he added, 'Give it up, Murchison, an' winter at the Fort with the rest. It's temptin' Providence to cross the ranges now.'

A murmur of approval followed, and a tall, broad-shouldered man, with an indefinite something in face and manner which stamped him as different from the rest, though there were men of education among them too, laughed lightly as he answered, 'Well, we three are going to try. It's all a matter of taste; but being snowed up six months in a log hut when I've gold, and all the cities from 'Frisco to Mexico to spend it in, does not appeal to me. Eh, Jasper and Allen?'

Then a big Canadian who was leaning against a boulder straightened his gaunt form, and answered in a deliberate drawl, 'I'm with the Captain; but it's not a jamboree that's temptin'

me. I've struck enough to stock the clearin' way back by Superior shore; and if it's any way possible to make the south bend of Yukon and catch the last steamer, I'm going to do it. I've had enough of Alaska to last my life.'

Geoffrey Allen, a young Englishman, and the third of the trio, nodded silently, and thought the more. He had sufficient reasons of his own to attempt the passage of the mountains in the face of any risks. Murchison and Jasper were his partners. They had met in the early spring by a certain glacier-barred pass, three men of widely different birth and character, who afterwards learned to trust and respect each other on the ground of a common manhood and courage. What Murchison's past had been Allen never knew; but there was a reckless daring and unostentatious pride about the man, as well as a tone of command in all he said, which had gained him the sobriquet of Captain. Indeed, from odd sayings let fall at times, Allen gathered that he had once served her Majesty upon the sea. Jasper was different. He was merely a rough woodman, great with the doublebitted axe, and kindly in heart.

Presently the miner who had first spoken growled something about an early start, and the weary men dropped off to sleep one by one, while Allen lay rolled in his blanket beneath a boulder, looking out into the night. A bitter wind sighed through the pines above, and, crisping the open centre of the lake into ripples, set the fringe of ice heaving and crackling. Upon the farther shore he could see the rigid conifers rising darkly from the water's edge, while a line of snow, jagged and serrated, shone very cold and white against the deep indigo above. Then his thoughts went back to the shingle-roofed house by the sunny shores of Burrard Inlet, where he knew an anxious heart waited for the news of his safety which never came, and he determined that if it was in the power of man to force a way to the great river it should be done.

A hand was laid upon his shoulder, and Murchison flung himself down at his side. 'Still awake, partner?' he said. 'Thinking of the folks at home, and too anxious about the journey to sleep, eh?'

'Yes,' was the answer. 'We have been good comrades, Murchison. Listen to a little story—and then you'll understand. For three years I worked harder than any slave, breaking prairie in Manitoba, and twice the crop was good. Then Elsie came out from home, and we were married in Winnipeg. A few happy months followed, for the crop promised well and I had put my last cent into wheat. Then the hail came and wiped it out, smashed every blade and ear down into the earth, and left me a ruined man. I sold out for what I could get, took a little house for Elsie at Vancouver, and left her all I had in the world except enough to bring me here. The

money must be running very low, and what might happen when it's gone I dare not think. Here I am, with enough to start us fairly again—and get through I must.'

Murchison laughed bitterly. 'I did more than that for a woman once,' he said—'threw away caste and prospects—and she mocked me for it afterwards. There was another, too, who would have laid down her life for mine. Foolish, of course, but the best men and women who have crossed my path have been fools—and that's why I like you, Geoffrey. I was then— But let it pass; the gates of that life are barred against me for ever.' The voice grew deeper, and Murchison added, half to himself: 'Stay up here with nothing to do for six months but think; it would drive me mad.' Then he laughed his old careless laugh. 'Never mind me; there's something on my nerves to-night. Sleep and dream of home.'

The young Englishman pillowed his head on his arm, and his eyes grew very heavy; but until he sank into dreamless sleep he could see a tall figure pacing to and fro across the shingle by the lake, and when he awakened he found Murchison's blanket about his shoulders as well as his own. Rising stiffly to his feet, he found breakfast prepared, and his two partners already feasting on very rusty pork and grindstone bread, while the rest of the miners were stirring and grumbling among their blankets. An icy wind went through him like a knife, and he shivered when he felt the chill of a feathery snow-flake on his face. Then, after a hasty meal, they loaded up a light Indian canoe-a thin shell of cedar-wood with a sweeping stem cut in the likeness of the head of a bird-with the last of their provisions and blankets, lashed her on to red-pine runners, and were ready to

The miners clustered round, and rugged men wrung the partners' hands as they wished them 'Good luck,' for 'the Captain' had a way which made many friends.

Murchison smiled as he answered, 'Good-bye! I'll remember you among the snow when I'm basking in Mexico. Think of us still, sometimes, if we never meet again;' and the three, followed by an Indian packer, breasted up the slope, with the snow driving in their eyes. It was not an easy climb, for fallen pines cumbered the way, and the canoe was hard to haul; but, in a region of forests choked with fallen trees, glacier-seamed ranges, and countless torrents, a river is often the only road, and a canoe was almost indispensable. Presently the dwarf pines gave place to a slope of snow, the work became less toil-some, and at last they stood panting on the crest of the ridge.

Allen looked back, and saw a line of dark figures creeping along the margin of the lake. Afterwards he swept his glance southwards across

the chaos of snowy summits rising range beyond range, among whose defiles their pathway lay, and for a moment his heart sank as he contem-

plated the white wilderness before him.

Then Murchison smote him on the shoulder, and pointed to the long slope of snow, undulating white above, save where a blue-gray rock or stunted bush cropped through, and fringed below with sombre pines. 'The Indians' way is the best,' he said. 'Launch her off and save an hour's tedious easing down. Hang on forward, and I'll steer her with my feet. Get into the canoe for dead-weight, Jasper.'

'Not me,' answered the big Canadian emphatically; 'there's plenty ways of breaking one's neck easier than charging a pine at twenty miles an hour. That thing's not a toboggan, any way;' while Donovitch, the packer, smiled until his high check-bones almost hid his almond eyes, as he gave vent to a succession of sonorous 'u-chuck-chucks,' which doubtless meant something in his

own tongue.

'Don't stand there grinning like a graven Siwash image, but thrust her off,' cried Murchison; and Jasper observed dryly, 'Guess we'll find you in the lake, if you ever get through the forest. Stand by, while we let her go.'

Allen braced his foot against the forward lashing, and leant upon the canoe as she commenced to slide down the slope; then the pace grew faster, and a rush of keen air smote his face like the lash of a whip. The hillside dropped more steeply, and a cloud of feathery particles whirled up from beneath the runners as the extemporised toboggan leapt forward at headlong

speed.

'Hang on tight,' yelled Murchison, lying with his chest across the canoe and his left leg buried to the knee in the torn-up wake of snow, as he tried to swing her clear of a jutting patch of rock. But the canoe was not to be steered after the manner of a tuque - blen toboggan. She was going her own way now—the shortest to the bottom, across whatever might lie between. Next moment there was a grinding crash, and Allen felt every bone in his body shaken. The runners smoked as they hissed across the stone—and then they were flying downhill again, with the wind screaming past his ears and nearly taking his breath away.

Exhilarating while it lasts — but there's trouble on hand below,' gasped a voice; and Allen shuddered as he watched the dark belt of pines rushing towards them from beneath. Then a bush of tall furze, or it might have been a cluster of young conifers, lay before them, and he saw half his comrade's length stretched out into the snow, with a white mass curling across the human rudder like the wash of a screw propeller. But again the rudder failed to act. The canoe drove straight down upon the obstacle, obliterated it from off the face of the snow, and, with a mass

of broken brushwood piled about her, and the helmsman's garments torn to ribbons from ankle to knee, swept on towards the pines.

'I don't think she would go through a boulder, or a tree. Perhaps we had better jump,' Allen heard his comrade say; and, even as he pulled himself together for the leap, there was a sudden jolt, a wild lurch, and he was flung bodily through the air, and driven head-foremost into a bank of snow. When he sat up gasping and scraping the stuff from his eyes, he saw Murchison quietly poking a rammed-down mass of white from out the ragged sleeves of his deerskin jacket.

'If we could only travel all the way like that. You may thank the top of that boulder we didn't charge the wood,' said the latter, as though nothing unusual had happened. Twenty minutes later Jasper and the Indian arrived, when they righted the overturned craft, tightened the lashings, and, after easing her carefully down among the pines, launched out on a stream which

swept through the winding gorge below.

For many following days they journeyed through a wilderness of wild and awful beauty, wherein but once or twice a white man had ever set his foot. At times they paddled and drifted hour after hour down some foaming rush of water stained pea-green by glacial clay, making toilsome portages to avoid the shallower rapids, for the streams were shrinking day by day as the frost bound fast the feeding glaciers on the heights above. At others they hewed a pathway with the axe through the network of fallen boughs and brushwood which choked the forests, or, with toil incredible, dragged the canoe over the crest of a divide.

Twice the thin ice in the centre of a forestgirt lake gave way beneath their feet; and once a great charred trunk in a 'brulée,' or burnt forest, came thundering down across their path, and one blackened limb swept Jasper's hat from off his head.

But the rivers were open still, and generally these trended south in the direction they would go.

Then it came about that at last they drifted down a white-streaked rapid towards the mouth of a gloomy canon, through which the river thundered, the spray rising like steam above it into the frosty air. Out of the haze there rose a hoarse, pulsating roar, the voice of many waters, and Allen shuddered as he gazed.

Murchison, however, surveyed it critically and approvingly. 'Very much like the mouth of Sheol,' he observed, 'or, to put it poetically as well as practically, a pathway driven for us through the heart of the eternal hills. How long it would take to cross that range, or if it could be done at all, Heaven only knows. I prefer going through by the road the river made.'

Jasper answered nothing for a while. He had learned the tricks of Canadian river 'lumbering' by the banks of the Ottawa. Then he said, 'The Captain's right, and the river's the only way. But whether we'll come out at the other end men or ground-up bones is more than I can tell.'

Allen said no word, but clutched his paddle the tighter, and prepared to face what lay before them. Soon the giant walls of rock closed about the river; and, veiled in a haze of spray, the canoe slid on down a frothing swirl of water, while huge boulders, clinging pines, and ragged quartz-shelf went flashing by. Once, when they crossed an eddying black pool, he glanced aloft, and saw a sheer rise of blue-gray stone, stained vermilion in places and veined with milky quartz, towering so far overhead on either hand that the heavens above appeared a mere strip of blue. Then the intermittent boom of falling water drew swiftly nearer, and the Indian, crouching in the bows, pointed towards a slide of green where the river poured bodily over a ledge. There was a great spouting of white where it met the eddy below, and Allen noticed a curious flash in Murchison's eyes as he said, 'Will she ever go through, Jasper?'

'I've been down worse; but it's bad enough, and there's not foothold for a mink ashore,' was the answer. 'Ready with the paddles!' and Allen held his breath as they drove her towards the fall. For a moment the cance slid steadily and apright down the centre of a smooth-skinned lip of green. Then she leapt forward—he could feel the light cedar dropping from beneath his feet—and with a mighty plunge drove out through

the boiling confusion below.

'All together; paddle for your lives,' yelled Jasper, and the blades beat the water madly. Just in time, for the grasp of the whirling eddy had closed about the canoe, and was dragging her back stern-first towards the foot of the fall. For a few moments she hung stationary, and the veins stood out like whip-cord on the adventurers' foreheads as they plied the bending paddles. Then a curious funnel-mouth opened up beside them, and sucked down a fir-branch that floated past. Again and again the dripping paddles flashed, and foot by foot they drew out of the clutch of the side-swirl, until the central rush swept them out of the pool and down the boulder-strewn rapid beyond.

This was safely passed, and, just as darkness closed down, a narrow strip of shingle opened up in the mouth of a transverse gully, and they ran the canoe ashore. A roaring fire of resinous driftwood, which will burn when soaking wet, was made, a meal prepared, and then the four lay shivering in a narrow pit scooped out of the shingle, with their feet towards the fire.

Tired as he was, Allen could not sleep. A bitter wind swept sighing through the gorge, the mighty walls rang and vibrated with the roar of water, and he lay watching the red glow of the fire flicker across the face of the tossing rapid, and

the canoe swinging to and fro upon an eddy. He afterwards remembered that its mooring line slid across a shelf of rock at times. Murchison also was wide awake; in fact, he rarely seemed to sleep, and the two men often sat talking for hours as they shivered over the fire.

Presently he knocked the ashes out of his pipe and said sombrely, 'Allen, I would give all this yellow dross to be even as that savage, or the good-humoured and blindly-courageous animal by your side; and yet six years this very night there was no prouder man than I. I remember that night well, for something happened that left a mark.'

Then Murchison laughed, and added lightly, as he proceeded to refill his pipe, 'Probably this moralising palls upon you; but sometimes one cannot resist the childish delight of talking—and I like you, Allen.'

As had happened before, the younger man wondered whether his companion spoke in jest or earnest; therefore he only answered stolidly,

'Go on if it will do you good.'

Murchison frowned as he continued: 'I remember the roar of Spanish guns saluting the flag as our sister-cruiser steamed into the roadstead of Santa Cruz, the loveliest bay in all the Atlantic isles, and that night the elite of the Spanish city came off to our dance on board. I, can see the whole thing now-the long white deck, the moonlight on the bay, and the great black Cordillera above it all. There was a throng of olive-skinned beauties on board, and two Spanish warships flashed their search-lights upon the brilliant crowd filling our quarter-deck. Warmth and brightness, music and flowers, and I the Pah! what of that? In a week we may be frozen stiff in the Alaskan snow. You're going back to your wife and home-lucky manand I to waste this gold in half the gilded hells between Seattle and Mexico, in pleasure-heavens and earth, in pleasure!'

Allen stirred uneasily, and his partner continued, slowly and deliberately: 'I've about worked out my sentence, for there are things which no man can endure for ever. If anything unexpected happens remember that, and divide the gold between yourself and Jasper. If not, you can set it down as the light-headed nonsense of an over-tired man—there's no liquor in this delect-

able region.

Then the adventurer smiled carelessly as ever

as he said, 'Good-night!'

Allen still lay awake, and now and then he cast puzzled glances at his companion. Murchison's face seemed strangely drawn and old when the firelight fell upon it, and his jaw was set like flint. 'Another man with a history, and a striking one at that. I always fancied there was something upon his mind,' he said, as at last his eyelids closed.

It was broad daylight when he awakened, and

breakfast was under way. While he rubbed his hands and shivered, the roar of water drew his gaze towards an awful, tossing rapid a hundred yards away, where the whole weight of the river thundered down a slope, among mighty splintered masses fallen from the cliff above. When he took his seat beside the fire Murchison greeted him with his usual careless ease. 'I was talking nonsense when half-asleep last night, partner,' he said. 'Nothing like sunlight for brushing the vapours aside.' Then he commenced one of his inimitable stories, and even the stolid Jasper laughed until the tears stood in his eyes.

Breakfast was just over when the Indian sprang to his feet with a hoarse cry, and Allen's heart stood still. He saw the canoe, with all their stores on board save the few that lay upon the rock, slide slowly out of the eddy, the end of the chafed-through mooring line hanging across her

, 'Sure starvation, and long odds on drowning, unless I can get her in time,' cried Jasper, tearing at his long knee-boots; but Murchison broke in: 'Are you mad—with a family depending on you? This is my time—at last,' he said. Then a dark figure launched out through the air, and clove the green flood with its arms above its head.

'Swims like a pickerel or a log-driver; but he'll never get there in time. God help him!' said Jasper hoarsely, as their comrade shot out across the streaky flow. There was neither foot nor hand hold on either of the smooth-worn walls beyond the shingle, and Allen felt something drumming in his ears as he watched man and canoe drive faster and faster towards the deadly smother below. Just on the fringe of the mad rush, down which the swamped canoe was already whirling, Murchison turned towards them, and for a moment raised an arm out of the water. Allen fancied he waved his hand-he was sure there was no cry for help; then a curling white ridge broke across the swimmer's head and sucked him down. Once, as the two stood with staring eyes and half-open lips, something which might have been a shapeless heap of clothing broke the surface of a frothing eddy, and sank again; and with the cold perspiration beading their foreheads they turned their gaze away.

For a time neither spoke, until Jasper said slowly and huskily, 'The Captain's gone; the river's got him now;' then he gripped Allen's arm as he added, 'I saw his face—just at the last—and I could have sworn the man was glad. Well, partner, there's starvation here, an' we can't be far from the big river now. What's the matter with trying the range?' But Allen made no answer; he was too horror-stricken to speak.

With the gold, which always lay beside them, and but a few days' rations, they turned their backs on the fatal canon, and clambered up the

transverse gully. For a week they floundered through the snows above, starving on a handful of food each day, until one morning Allen cast himself down upon a frosted shelf of rock, his breath coming thick and fast, and pointed to a mighty flood of pea-green water sliding through the gorge below.

Several days they waited, crouching about a fire among the boulders, feeling the cold hand of death already closing about their throats, and then a little stern-wheel steamer came panting down the river, and they knew that they were saved.

Allen collapsed limply and abjectly as ready hands dragged him out of the steamer's scow, and it was not until he was sweeping south across the Pacific in the last ship of the season that he began to recover his nerve,

There is little more to tell. The young Englishman was fortunate in one or two contracts he took in Vancouver City, and dwells there now in comfort. Never was he able to learn anything concerning the unknown adventurer whose bones lie whitening in the lowest depths of some deep, black pool. He only remembers him as a true and kindly comrade, who had been called to answer for his deeds in a court which is greater than any on earth.

THE HOPE OF LOVE.

THERE is not time enough to love you here—
Only a few quick years to hold you fast.

Days burn away: Love brings the sun so near!

And nights but breathe their blessings, and are past;

And season melts in season. Oh, my dear,

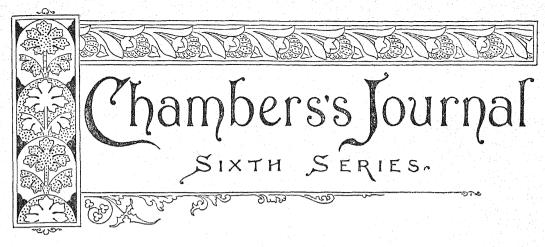
And must we part at last?

Yet, search mine eyes, and tell me if my youth
Laughs out to you as when you called it first.
Nay, but I know it must, for I, in sooth,
Was older then than now. 'Twas you who nursed
My soul from sickly doubt to faith and truth
When life was at its worst.

And, looking back within your eyes, I find
A smile that overcomes the fear of age:
A brave smile, telling how the joys behind
Were not more sure than those that gild a page
Of life as yet unread—delights designed
For our joint heritage.

And is there something farther distant still—
Somewhere without the world—for you and me,
When we have stepped across the quiet rill.
That men would magnify with mystery?
What can we say, O heart, of what may be?
'Love hopeth all things:' let us hope until
God smiles and bids us see.

J. J. BELL.



MODERN LIFE. INTHE $J \to W$

By ARNOLD WHITE.



is pretty certain that, unless a great war submerges lesser questions in the welter of international conflict, the Jew will engage the close attention of Europe and the United States during the next score of

Racially and individually, the Jew is probably the most interesting personality of this day: but the books-their number is legion-that have been written about the Jews and the Jewish Question deal almost exclusively with bygone times of the race.

I purpose to describe the modern Jew as he is, not as he is supposed to be. Thus it is unnecessary to do more than glance at ancient and mediæval history, except to point out that the outburst of Jew-hatred of the thirteenth and fourteenth centuries, which ended in the expulsion of the 'Chosen People' from England, France, Portugal, and Spain, seems not unlikely to be repeated early in the twentieth century.

Although I shall not dwell on the history of the Jews of old-a dozen handbooks on the subject are available in every free library-it may be pointed out that the first regular settlement of Jew money-lenders in England were those traders in cash who followed William of Normandy to England between 1068 and 1071, and were enabled to establish themselves in separate quarters ('Jewries' of the chief towns of England), the Jew being then the king's chattel. He was too valuable a possession to be sacrificed to the mob, and was, accordingly, protected by the sovereign himself against any anti-Semitic outbreak. The presence of the Jew was beneficial to the kingdom at large -at all events in the earlier years of his settle-The outburst of architectural enterprise which followed the Conquest covered Britain with castles and cathedrals. The erection of these stately buildings was due entirely to the loans of the Jew. John Richard Green describes the buildings, which at Lincoln and at Edmundsbury still retain their title of 'Jews' Houses,' as almost

the first houses of stone that superseded the habitations of the English burghers.' The Jews assisted in the revival of physical science. There was a Jewish medical school at Oxford; Roger Bacon studied under English rabbis. All went fairly well until 1290, when the success of the Jews in amassing wealth, the tenacity with which they held to their particular ritual and customs. and the attitude of aloofness which they have preserved throughout the long centuries aroused against them popular hatred, which grew rapidly in intensity. While royal protection did not waver, popular feeling was powerless to injure them; but when Edward I., eager to find supplies for his treasury, made a money-bargain with the clergy and laity, the Jews were driven from the realm, and Edward himself was provided with supplies for his treasury. Sixteen thousand Jews preferred exile to apostasy. Many were wrecked; others were robbed and flung overboard. From the time of Edward to that of Cromwell no Jew touched British ground. The achievements of the Elizabethan era, its rich harvests in art and literature, its triumphs by sea and land, and its colonising enterprise, were accomplished without the presence of the Jews.

Shakespeare and Marlowe were obliged to resort to Venice and to Malta, respectively, to find a type of Jew for presentation to the British public. Until the reign of Charles II., the Jews had no legal status. They have remained in this country since the time of the 'Merry Monarch.' Charles II., impecunious as Edward I., saw in their advent an

opportunity to refill his treasury.

The history of the Jews in England is the history of the People of Dispersion in other lands, with the exception of the Holy Roman Empire; and the significance of the recent outbreaks against the Jews in Russia, in Austria, in Germany, in Algeria, and in France lies in the fact that they are but the repetition in modern garb of the popular outbreak to which brief allusion has been made as having occurred in the reign of Edward I.

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MAY 28, 1898.

The race-hatred against the Jews is not new. A comparison between the records of their sojourn in the various countries of Europe-allowing for the differences of environment-seems to include certain 'features' common to them all. In the first instance, whether the king or democracy is sovereign, the entrance of the Jews into a country is suffered as a matter of convenience. The entry once made and their position established, their temperance, assiduity, and power of will secure them more or less easy victory in the race for wealth. There are but two nations with whom the Jews have been unable to effect a lodgment: Scotsmen and Armenians are impervious either to their fascinations or to their attack; and in Scotland and Armenia, accordingly, the modern Jew is scarcely found except in the form of a few hard-worked journeymen tailors in the cities of Edinburgh and Glasgow, and a few nomadic pedlars in the towns of Armenia.

The majority of living Jews are subjects of the Emperor of Russia. The Jewish Question in Russia is regarded by the Russian ministry as an insoluble problem. Some six millions of Jews are pent up in the sixteen western provinces of Russia and the ten provinces of Poland. Rapid increase and low death-rate of the 'Chosen People' impale their Russian rulers on the horns of a dilemma. Massacre is no longer available as an expedient for thinning out the superfluous Hebrew subjects of the Tsar. Pestilence possesses no terrors for the Jew; long residence in the slums of Europe has rendered his constitution immune against the terrors of smallpox or typhoid or other fever. If pestilence or massacre is not within the region of practical Russian politics, the ministry of which Monsieur Pobedonostzeff is the responsible spokesman is equally unable to let the Children of Israel go and to give them chances similar to those of the orthodox inhabitants of Russia.

One dire consequence of this overcrowding and constant multiplication of the inhabitants of Russian Jewry is the spiritual, moral, and physical degeneration of its inhabitants. The continual misery, the absence of hope, the constant assertion of their inferiority by the ruling authority, have modified the original characteristics of the majority of the Russian Jews. They are not permitted to be gardeners, to hold land, to live in the country, or to take part in agriculture; and they are debarred from the healthy means of life open to the rest of their fellow-subjects. The consequence is that, in order to provide bread for his family—the Jew marries early as a matter of course-many of them are compelled to resort to dishonesty in order to escape starvation.

Probably the five and three-quarters or six million Jews under the rule of the Tsar form the unhappiest community on the face of the earth. Intellectually endowed far beyond the average European, they (except a small fraction of them)

are deprived of the means of education, and their spirits are depressed by the compulsory restrictions arbitrarily imposed upon them. What wonder, therefore, that a considerable number of the Russian Jews are driven by the errors of the Russian government to exploit vice, since they are not permitted to develop industry? If many Russian Jews live by preying on the weakness and passion of others, the reason is neither that they have a double dose of original sin, nor that parasitism is an indelible characteristic of the race, but that the poor Jew is compelled by the government of Russia to make a choice between starving and wrong-doing.

The vast majority of Russian officials and citizens believe that the Jews are merely parasites-that they cannot live except as middlemen, money-lenders, and exploiters of vice. The French have recently come to the same conclusion. Is it based on fact? Wherever material comfort and personal safety are obtainable, there is the nimble brain, the deft finger, and the sensitive organisation of the Jew to seek them. In other countries medicine, music, law, surgery, politics, journalism, and art are being rapidly captured by the Jewish race. In Russia, except to a very few, careers in those professions are closed against the Jew. Russia is honest in this matter. The ministers hold that it is better to lose a limb or an eye than to enter whole into destruction. Russia does not affect to love the Jew. She believes him to be to-day what he was in the time of Moses-the devoted worshipper of the Golden Calf. To keep the Jew from contact with the main body of the Russian people is, accordingly, an integral part of Russian policy. He is not allowed to settle in Siberia, and, unless a drastic change be made in the administration and control of Jewish subjects of the Tsar, all the raw materials for a bloody tragedy are to be found within the Russian pale.

As the Russian Empire comprises one-seventh of the land surface of the globe, and covers an area of nearly nine million square miles, the exclusion of the Jews from the higher ranks of the Russian civil and military services, notwithstanding their admitted intellectual superiority, is the most extravagant compliment ever paid by a great governing race to downcast wanderers on the face of the earth-without a common country, or a common language, or a common policy. With the tremendous task confronting the Tsar's ministers in the Russification of Asia from the Caspian Sea to Port Arthur, and with the absence of a middle - class such as that which is the strength of Britain, whence is Russia to draw her administrative material if she continues to exclude from her service the ablest of her subjects? In an undeveloped country such as Russia, the presence of one Jew in eight hundred of the population would scarcely seem to constitute a formidable danger to the State. Russians,

however, think otherwise; and the only alternative practicable is to give the Jews a larger area of settlement, either contiguous to the Russian pale, or in Armenia, when that country finally comes under the sceptre of the Great White Tsar.

Notwithstanding that the state of the Jew in Russia is parlous, he is not much happier in Austria or in Hungary, although the power that he exercises and the conditions of his life are wholly different. Education is open to the Austrian Jew. The proportion of Jews in the Austrian universities is much in excess of what might be expected from their actual number in the country. Jews form 5 per cent. of the population; but 193 of the students at the universities are Jews. In the Communal School of Vienna, among 42,624 pupils, 5600 were Jews. Still, the Jews are not handicraftsmen; they prefer working with the head. Of the 6274 pupils at the technical schools of Vienna, only 110 were Jews. The Jews of Austria and Hungary are powerfully represented in every walk of life that leads to influence and fortune. The great business houses and the banks and the railways that are not owned by the State belong to or are controlled by them. The press, with the exception of the Czech organs, is almost exclusively in the hands of the Jews.

'Have you any Christians on your staff'! Mr I. Zangwill asked the editor of the great Pesth newspaper, the *Pesther Lloyd*.

'I think we have one,' was the editor's reply.

The mastery of the press in Austria is symptomatic of the Jewish capture of newspapers all over Europe. Every shade of thought speaks

over Europe. Every shade of thought speaks through the pen of the Hebrew. Even the anti-Semitic papers are, many of them, written by Jews.

The control of finance and the stupendous success which follow their devotion to the trade in money have brought to the Jews great fortune and much hatred. As in the thirteenth century, the peasantry, goaded to madness, rose against those whom they deemed to be their persecutors.

Look at this picture.

It is evening, in winter. The tearing wind from the north howls and moans, driving the snow before it in dust that finds its way into every nook. A hovel stands by the roadway, its rickety door secured by a padlock. The few sticks of furniture, even the miserable bed upon which its emaciated occupant lay, had been seized by the Jew to whom she is in debt, and the door is closed against her. The rags that scarcely cover her are all the worldly goods that she possesses. Food she has none. Old, lonely, and ill, she has no strength to drag herself to the village. She sinks down in the snow to die. In the morning her frozen body is found with a smile on its worn face.

This is no fancy sketch. It is a fact. The sequel is equally striking. The peasants, furious

at the cruelty, surrounded the Jew money-lender's house the next night. Having caught him and bound him, they skinned him alive. Then they burnt him to death.

And thus the weary circle of Jewish extortion and un-Christian resentment is traversed in Austria as in every country where Jews and Gentiles have come into conflict since the Dispersion. So much for the poor Jews.

No Jew is received in society. The only exception is in favour of the Rothschilds, and even they are not treated as if they were really members of society. An aristocracy which prides itself on its pedigree and sixteen quarterings has still much of the tradition of its Crusading ancestors—that the bitterest enemies of Christendom are the Jews.

The story of Prince Festetics and the Prince of Wales is well known in Austria. The Prince of Wales was invited to shoot with the late Baron de Hirsch, and, while staying at St Johann, suggested going on from there to the Austrian magnate. I should be glad to receive your Royal Highness on any other occasion, wrote Prince Festetics, but not coming from the house of that Jew.'

In commerce and money-making generally the Jew beats the Austrian all along the line. The Austrian's weakness is his opportunity. Among the pleasure-loving and indolent Austrians the Israelite reaps a rich harvest. The Austrian revenges himself by hatred and abuse. He perceives that he is outdistanced; but he refuses to see that the real cause is his own idleness and Jewish industry.

In France the feeling against the Jews has been so frequently described in the newspapers that there is no occasion to dwell upon the facts which gave rise to it. The multiplication of their numbers, and what may be called the 'aloofness of Israel,' are rapidly bringing the Jewish Question to the front. Jewish champions compare themselves with the Huguenots; but the large majority of the Jews, whether in England or elsewhere, have no title to be included in the same category as that of a race whose absorption by the land of its adoption is a matter of two generations. The difference between the Jewish element in national life and in every other racial constituent lies in the fact that, whereas all other races intermarry, worship, and eat with us, the strict Jew will do none of these things. He remains aloof. He preserves his tribal customs. He is intensely proud of his origin, and not seldom, secretly or openly, contemptuous towards the people of his adoption.

In an article in the Contemporary Review for January 1898, a Russian Jew, who has accepted the hospitality of England for a few years, writes as follows: 'The English workman is . . a mere labourer. His work is like his temperament, drink, and diet—strong, stolid, and durable, but at the same time rough, coarse, and tasteless.' Again: 'The heart of the average British workman never throbs with any such sentiments—that

is, family love, religion, and race. I doubt whether it beats at all except when perhaps he is engaged in rabbit-coursing, dog-fighting, or other such noble and innocent amusements. Poor innocent creature!

British workmen are contemptuously known as 'yokels' among Jewish workmen.

But there is a further element which differentiates the Jew who is loyal to his faith from all other foreigners who seek asylum with any nation. His close connection by blood and religion with a separate community existing in all other countries gives to the Jewish race a solidarity and a separateness which prevents it from ever becoming wholly absorbed by the country of its adoption. Whenever the question of the good or evil conduct of a Jew is discussed in the public press, this solidarity is exhibited. In the recent Dreyfus case every good Jew believed Dreyfus to be innocent because he was a Jew; for the same reason, the Jew-haters believed him to be guilty; the judgment in each case being arrived at without available evidence on either side.

The synagogues and the Jewish congregations in Poland, Lithuania, and Galicia, in case of need, exercise a stronger influence in the West over

good and humane Western Jews than any of the social or religious forces by which they are locally surrounded. As long as their diet is different, as long as Sunday is a week-day, as long as their origin is Oriental, as long as they decline to intermarry, so long is it impossible to regard the Jews as English, French, Spanish, German, Italian, or Russian. There exist, no doubt, a few of the upper classes who are absorbed, and by intermarriage and education have become Anglicised as the Huguenots are Anglicised. Of these I do not speak: I refer to that far larger proportion of the Jewish immigrants whose colonies are to be found throughout Europe. A great change is at hand. After six centuries of more or less toleration, the signs are not wanting that the Jewish Question is ripe for entrance into a new stage. As in other matters, it is for Russia to take the lead. She is compelled to do so; and her part will consist in the provision of territory by which the redundant population of her own Jewish pale may find a home, and perhaps found a state. The only spot available seems to be in the depopulated valleys and plains of Armenia. It will be strange if prophecy is fulfilled in this way. Personally, I believe it to be not only likely, but inevitable.

JOHN BURNET OF BARNS.

CHAPTER XXXII.-THE BAILLIES OF NO-MAN'S LAND.



HE next period in my life lies still in my mind like a dream. I have a remembrance of awaking, and an impression of light and strange faces, and then all is dark again. As to these days my memory is a

blank; there is nothing but a medley of sickness and weariness, light and blackness, and the wild phantoms of a sick man's visions.

When I first awoke to clear consciousness it was towards evening, in a wild glen just below the Devil's Beef-Tub, at the head of the Annan. I had no knowledge where I was. All that I saw was a crowd of men and women around me, a fire burning, and a great pot hissing thereon. All that I heard was a babel of every noise from the discordant cries of men to the yelping of a pack of curs. I was lying on a very soft couch made of skins and cloaks, in the shade of a little, roughly-made tent.

I lay still and wondered, casting my mind over all the events of the past that I could remember. I was still giddy in the head, and the effort made me close my eyes with weariness. Try as I would, I could think of nothing beyond my parting from Marjory at Smitwood. All the events of my wanderings for the moment had gone from my mind,

By-and-by I grew a little stronger, and bit by bit everything returned to me. I remembered with great vividness the weary incidents of my flight, even up to its end and my final sinking. But still the matter was no clearer. I had been rescued, it was plain; but by whom, when, where, why? I lay and puzzled over the situation with a curious mixture of indifference and interest.

Suddenly a face looked in upon me, and a loud, strident voice cried out in a tongue which I scarce fully understood. The purport of its words was that the sick man was awake and looking about him. In a minute the babel was stilled, and I heard a woman's voice giving orders. Then some one came to me with a basin of soup.

'Drink, lad,' says she. 'Ye've had a geyan close escape; but a' is richt wi' ye noo. Tak this and see how ye feel.'

The woman was tall and squarely built like a man; indeed, I cannot think that she was under six feet. Her face struck me with astonishment, for I had seen no woman for many a day save Marjory's fair face; and the harsh, commanding features of my nurse seemed doubly strange. For dress she wore a black hat tied down over her ears with a kerchief, and knotted in gipsy fashion beneath her chin. Her gown was of some darkblue camlet cloth, and so short that it scarce reached her knees; though whether this fashion be meant for expedition in movement or merely

for display of gaudy stockings I know not. Certainly her stockings were monstrously fine, being of dark blue, flowered with scarlet thread, and her shoon were adorned with great buckles of silver. Her outer petticoat was folded so as to make two large pockets on either side, and in the bosom of her dress I saw a great clasp-knife.

I drank the soup, which was made of some wild herbs known only to the gipsy folk, and lay back on my couch.

'Now, sleep a wee, lad,' said the woman, 'and I'll warrant ye'll be as blithe the morn as ever.'

I slept for some hours, and when I awoke sure enough I felt mightily strengthened. It was now eventide, and the camp-fire had been made larger to cook the evening meal. As I looked forth I could see men squatting around it, broiling each his own piece of meat in the ashes, while several cauldrons sputtered and hissed on the chains. It was a wild, bustling sight; and as I lay and watched I was not sorry that I had fallen into such hands. For I ever loved to see new things and strange ways, and now I was like to have my fill.

They brought me supper, a wild duck, roasted, and coarse home-made bread, and a bottle of very tolerable wine—got I know not whence, unless from the cellars of some churlish laird. I ate heartily, for I had fasted long in my sickness, and now that I was recovered I had much to make up.

Then the woman returned and asked me how I did. I told her 'Well,' and thanked her for her care, asking her how I had been rescued and where I was; and this was the tale she told me.

She was of the clan of the Baillies, the great gipsies of Tweeddale and Clydesdale, offshoots of the house of Lamington, and proud as the devil or John Faa himself. They had been encamped in the little haugh at the foot of the Wormel on the night of my chase. They had heard a cry, and a man with a face like death had staggered in among them and fainted at their feet. Captain William Baillie, their leader, of whom more anon, had often been well entreated at Barns in my father's time, and had heard of my misfortunes. He made a guess as to who I was, and ordered that I should be well looked after. Meantime the two companies of soldiers passed by, suspecting nothing, and not troubling to look for the object of their search, who all the while was lying senseless beneath a gipsy tent. When all was safe they looked to my condition, and found that I was in a raging fever with cold and fatigue. Now the gipsies, especially those of our own country-side, are great adepts in medicine, and they speedily had all remedies applied to me. For three weeks I lay ill, delirious most of the time, and they bore me with them in a

litter in all their wanderings. I have heard of many strange pieces of generosity, but of none more strange than this—to carry with much difficulty a helpless stranger over some of the roughest land in Scotland, and all for no other motive than sheer kindliness to a house which had befriended them of old. With them I travelled over the wild uplands of Eskdale and Ettrick, and with them I now returned to the confines of Tweeddale.

'The captain's awa' just now,' added she; 'but he'll be back the morn, and blithe he'll be to see ye so weel.'

And she left me; and I slept again till daybreak.

When I awoke again it was morning. I saw by the bustle that the camp was making preparations for starting, and I was so well recovered that I felt fit to join them. I no longer needed to be borne like a child in a litter, but could mount horse and ride with the best of them.

I had risen and gone out to the encampment, and was watching the activity of man and beast, when one advanced from the throng toward me. He was a very tall, handsome man, dark in face as a Spaniard, with fine curling moustachios. He wore a broad blue bonnet on his head, his coat was of good green cloth, and his small-clothes of black. At his side he carried a sword, and in his belt a brace of pistols; and, save for a certain foreign air in his appearance, he seemed as fine a gentleman as one could see in the land. He advanced to me and made me a very courtly bow, which I returned as well as my still-aching back permitted me.

'I am glad you are recovered, Master John Burnet,' said he, speaking excellent English, though with the broad accent which is customary to our Scots Lowlands. 'Permit me to make myself known to you. I have the honour to be Captain William Baillie, at your service, captain of the ragged regiment and the Egyptian guards.' All this was said with as fine an air as if he were his Majesty's first general.

At the mention of his name I called to mind all I had heard of this extraordinary man, the chief of all the south-country gipsies, and a character as famous in these days and in these parts as Claverhouse or my lord the king. Something of his assumed gentrice showed in his air and manner, which was haughty and lofty as any lord's in the land. But in his face, among wild passions and unbridled desires, I read such shrewd kindliness that I found it in my heart to like him. Indeed, while the tales of his crimes are hawked at every fair, the stories of his many deeds of kindness are remembered in lonely places by folk who have cause to bless the name of Baillie. This same captain had, indeed, the manners of a prince; more, he was reputed the best swordsman in all Scotland, though, as being barred from the society of men of birth and education, his marvellous talent was seldom seen. He was of the most indomitable courage and self-possession; and even in the court, when on his trial, he spoke fearlessly to his judges. I do not seek to defend him; but to me and mine he did a good deed, and I would seek to be grateful. When, long afterwards, he was killed in a brawl in the alchouse of Newarthill, I heard the tidings with some sorrow, for he died bravely, though in an ignoble quarrel.

He now informed me with great civility of the incidents of my escape and sickness. When I thanked him he waved me off with a great air.

'Tut, tut!' said he, 'that is a small matter between gentlefolk. I have often had kindness from your father, and it is only seemly that I should do my best for the son. Besides, it is not in my nature to see a man so sore pressed by the soldiery and not seek to deliver him. It is a predicament I have so often been in myself.'

A horse was brought for me, a little wiry animal, well suited for hills and sure-footed as a goat. When I felt myself in the saddle once again, even though it were but a gipsy hallion, I was glad; for to one who has scrambled on his own feet for so many days, a horse is something like an earnest of better times. Captain Baillie bade me come with him to another place, where he showed me a heap of gipsy garments. 'It is necessary,' said he, 'if you would ride with us, that you change your appearance. One of your figure riding among us would be too kenspeckle to escape folk's notice. You must let me stain your face, too, with the juice which we make for our bairns' cheeks. It will wash off when you want it; but till that time it will be as fast as sunburn.' So, taking a crow's feather, and dipping it in a little phial, he with much skill passed it over my whole face and hands. Then he held a mirror for me to look, and, lo and behold! I was as brown as a gipsy or a Barbary Moor. I laughed loud and long at my appearance; and when I was bidden put on a long green coat, the neighbour of the captain's, and a pair of stout untanned riding-boots, I swear my appearance was as truculent as the roughest tinker's.

Thus accoutred, we set out, the men riding in front in pairs and threes, the women behind with donkeys and baggage shelties. It was a queer picture, for the clothing of all was bright-coloured, and formed a strange contrast with the clear, chilly skies and the dim moor. I had no guess at our destination; so, when we turned to the westward and headed through the moss towards the town of Biggar, I was not surprised. Nay, I was glad, for it brought me nearer to the west country and Smitwood, whither I desired to go with the utmost speed. For, with my returning health, my sorrows and cares came back to me more fiercely than ever. It could not be that my cousin should find out Marjory's dwellingplace at once, for in the letter there was no clear information, only indefinite hints which in time would bring him there. The hope of my life was to reach the house before him and rescue my love, though I had no fixed plan in my mind, and would have been at a sore loss for aid. Nevertheless I was quieter in spirit and more hopeful. For after all, thought I, though Gilbert get my lass, he yet has me to deal with; and I will follow him to the world's end ere I let him be.

(To be continued.)

THE WILD CATS OF THE PAMPA.



WHERE can one find more curious or more fascinating creatures to make pets of than on the pampas of South America. During the few years that I lived there many strange varieties passed through my hands. Perhaps

the monotonous existence on those monotonous plains made one turn with a greater interest to the animal life around one. There was a peculiar pleasure in noting, as the garden became stocked with fruits and flowers, and the tiny new trees grew big enough to afford some shelter, that birds till now unknown in the district found it out and set to work nest-building and establishing themselves in its kindly enclosure. Outside, the birds of the campo had learnt to do without shelter. We knew to seek for their eggs where the ground was barest; they scorned even the tufts of grass or high-growing paja. Yet

how difficult it was to find them! The polished wine-coloured eggs of the martinete, and the gray-green, marked roughly with brown, of the teru-teru (plover), seemed to wear the colours least likely to catch the eye.

Having no knowledge of natural history, I could only watch and wonder at the ways of my bird and beast friends, and I fear too often, from ignorance, allowed them to die in captivity.

These wild creatures of the pampas seemed even more difficult to rear than the animals of more civilised lands. I have a suspicion that the abundance of rich food given to them in ignorant kindness by the servants was the chief cause of death to creatures used to feeding on coarse grass or on their natural prey, sought after with difficulty. Water they could only have found in rain-holes, which are often dried up for weeks at a time.

Their death was all the more distressing as no birds or beasts more readily accepted petting. Surely, in this newly-populated country, they had not yet learnt to look on man as their deadly foe.

The beautiful gamitos (young deer), from the hour they were caught, allowed themselves to be handled, showing no signs of fear; yet when tied up they died of rage or in struggling for freedom. Antonia, my native maid, adored all living creatures, with the exception of vipers and the poisonous toad and spiders; these she would bravely attack and promptly kill, declaring that they were deadly. She had the gift of taming wild creatures. She taught me to leave the gamitos alone. When I did so they made no attempt to wander, but would follow us about, even into the house, snuffing curiously at the strange things found there.

A hideous, grotesque mulito (small species of armadillo, named from his long ears) became very tiresome from the way he pattered along at our heels, in danger of being trodden upon, with a provoking persistency that at last drove us to return him to his native wilderness. Another curious pet, known as the chuño, seemed thoroughly to enjoy the somewhat dangerous society of Antonia's little brother. This large, handsome bird was said to be peculiarly clever in killing snakes, seizing them in his beak and dashing them on the ground. Certainly he had a very effective beak: no one could marvel to see the small José fly before it, as, with outstretched neck and flapping wings, the chuño, striding on his lengthy legs, drove him to take refuge in the kitchen; yet José was without doubt muy guapo-that is to say, very plucky. Unfortunately, during one of these encounters the chuño snapped one of his slender legs. Antonia, never at a loss in an emergency, with great skill glued the broken bits together, setting the leg in a splice. Strange to say, the patient survived some weeks, but died before the hot weather had brought out the snakes; so we never had a chance of testing his skill.

But of all our pets Kit was the dearest and prettiest. He was a yato-de-paja (grass cat), so called from the thick, high grass in which he makes his home. He lies very close and probably sleeps during the day, but is sometimes seen at dusk prowling after his prey or playing with his kittens.

It is supposed that these cats are never tamed. At one time I had three kittens: never have I seen greater savages. They took very kindly to raw meat, tearing and clawing it with flashing eyes, and growling fiercely, like little bears. We found they suffered from confinement, so gave them the run of the garden. Three times a day they walked in solemn procession, with muttered growls and humped backs, to the kitchen, where Antonia fed them with a too liberal supply of beef (there is no butcher's bill on an estancia). Two of

them died, and the third, we hope, returned to his friends in the paja.

These cats so interested me that when a friend brought me Kit-a baby of a week or so, as fluffy as a Persian kitten and as jolly as a puppy -I determined to tame him. He was strictly fed on milk and soaked bread, and never teased or excited to anger. From the first he was wonderfully tame and showed signs of affection, soon following me about like a dog, and even answering to his name. This, I believe, is not usual with cats. In course of time he developed a fine ruff down his backbone, and cinnamon-coloured stripes appeared on his dark fur; his face was sharper than that of the domestic cat; his legs thicker and shorter, and his tail broader, with longer hair; his ears were, I think, larger and tufted. Though not as lithe as an ordinary cat, he played with charming grace. When excited he would growl, and when pleased purred like any pussy. Climbing and leaping were not amongst his accomplishments; but I have seen him sit up on his hindlegs and look out of the window for two or three minutes at a time. Most cats can put on grand airs that recall their royal cousin the tiger; Kit had a far stronger resemblance to a bear: I am afraid he too often deserved to be called as cross as one. Yet he was very sociable, and showed great affection for me. I left home for a month, and for a few days Kit seemed to miss me. When I returned he appeared a little shy, but during dinner he climbed up my skirt and settled himself on my lap-his favourite place. The next morning Antonia found him waiting outside my bedroom door; he ran up to my bed and asked to be taken up and petted, purring with satisfaction when his wish was granted. It struck me as very wonderful that a creature of so wild a race, perhaps never from generation to generation ever seeing man, certainly never coming in contact with him, should be so friendly and affectionate.

When left to Antonia's care he had learnt to steal from the kitchen, and suffered in consequence. One evening I missed him, and called for him in vain in the garden and orchard. Early next morning he was found, cold, wet, and limp, lying in the dew-covered grass. He revived a little with warmth, but seemed in pain; once he turned to me with sad eyes that seemed to ask for help, and then he tried to lick my hands, and shortly afterwards gave a few sharp cries and died. It was a great sorrow to us all. I missed my little friend very much, especially in the evenings, when we used to walk out on the campo in the dusk, and Kit would dodge the owls who swept down on the ground before him, wondering if he was a creature to be caught and eaten.

A larger, and I believe much fiercer, cat was to be met with in our district—the gato monte. He took possession of the montes, or woods, as they grew up and formed dense cover. How did these creatures find out these island-like woods, sparsely scattered on the great sea of the pampas, in our neighbourhood only planted within the last twelve years?

It was through the clever robbery of a neighbouring poultry-yard that we were first introduced to this cat. The yard stood on the edge of a wood. Constantly during the night three or four fowls would disappear off their roosts; they were carried over a wire-fence and dropped at some distance, apparently unhurt, but each had a small wound showing the marks of a wild beast's teeth. So silently was this done that men and dogs on the watch were not disturbed; yet the cat must

have made several journeys, dragging heavy birds over a fence from eight to ten feet high. Such a thing had never happened before; it was black magic. After some months of watching, the thief was caught taking a siesta on the forked branch of a tree; he was shot on the spot. As no more fowls were stolen, he must have been the only robber of poultry-yards in our neighbourhood. In the almost tropical forests of the Gran Chaco, in the far north of the republic of Argentina, amongst the many wild beasts that are found there is a third species of the cat tribe—the tiger-cat.

FRIDA PETERSEN'S LOVER.

PART II .- CONCLUSION.



WENTY-FIVE days had passed. The weather had broken for Faroe, as it ever does with the beginning of September. The gloom of the long winter had begun to steal over the land, and things looked gloomy in-

deed. Miss Frida had been to school in Copenhagen, and she could play the piano—a gaunt instrument of black and gold, which, after the stuffed sea-birds and minerals, was the chief object of interest in the 'best room' of the farmhouse. She had never seemed very much at home in the rogstue,* and, from the time of her father's death, not once had she spent the evening there with the farm-hands and damsels.

Of course it was expected that she would show a certain reasonable amount of grief for her loss. But she seemed to carry it too far. It was, too, extremely odd that she should be so energetic in facing the bogs and rough weather at Skellingfjeld's roots, just on purpose to attend service at the Leinum church on Sunday, as if Douglas Graham's own reading of the service in the big barn at Siov ought not to have been enough for her, especially seeing that he and she were about to—

But herein also there was mystery. Frida had changed with regard to Douglas. From the day of her father's funeral something had come betwixt their hearts. None knew what the something was save only Nick Porteous and the two lovers themselves.

Douglas was never likely to forget the day of old Petersen's interment.

When, that evening, he had returned from his ramble on the hills (there was nothing like it for clearing the cobwebs from the brain) he had found the farm in a turmoil. Frida had had a succession of fainting fits, and no one knew what to do under such extraordinary circumstances. The farm-hands and neighbours had, in fact, done every-

thing possible to induce the girl to die beneath the shock. But Douglas brought wisdom with him, and Frida was soon able to speak and look like herself.

'Douglas,' she had said, almost with her first breath of reason, 'a man has been here—an Englishman—and he says that you once murdered a man. Tell me, my heart, that it is not true.'

She had repeated her question.

'Just the one word "No," Douglas. It is such a little word, and it shall be enough, for I love you very, very much!'

But still the young Scotchman had remained dumb, with fixed eyes, as he recalled only too distinctly the incidents which had led him to exile himself. The fellow had outraged all humanity, and wronged his—Douglas's—sister. How could he measure the force and consequence of a blow at such a time? And how was he to blame if the brute fell senseless against the edge of a chopper set with its blade in the air?

He was a murderer, sure enough—yet was there not excuse for him?

'Tell me,' the girl had pleaded, with her arms round his neck at length. 'I am your little Frida. You call me little, though I am not little; it is because of your love for me, is it not? Say that man lied—he had a bad face—and I will believe you against him; and it would make no difference if every other Englishman in England took his part against you.'

Then Douglas could keep silence no longer. He had tenderly unwound the girl's soft arms from his neck, and said:

'Frida, it is the truth. I killed a man three

'With those hands?' the girl had whispered, her face still and horrified like a dream-face.

'With this right hand. But listen; I will tell you about it.'

'No, no; I will not hear—I cannot! So my Douglas is a murderer; and my father is dead!'

^{*} Literally, smoke-room: the kitchen or common room of a Faroe house.

After which Frida had lapsed into the state of indifference towards all things (including Douglas) which so vastly astonished the Siov people. She read her books (of which she had an uncommon store), and evolved sad noises from the piano, and let domestic and business matters take their chance.

'It be hard saying what Miss Frida would do if she had not the Herr Graham to look after her,' said the Siov folk; and this was the opinion

throughout the archipelago.

Several times Douglas had interceded on his own behalf with Frida. If only she would let him tell the story of his crime, he felt she could not, being a sensitive and sympathetic woman, condemn him to the pit of disappointment and despair in which his heart seemed now to be chained down. But Frida was imperative in this matter, if in no other.

'It will kill me,' she would sob; or, 'Stay and take care of me, if you will; but never, never

mention that to me!'

It was a heart-rending situation, and after three weeks had passed, Graham resolved that it should end. Frida had a cousin in Kalsoean elderly dame of much respectability, and renowned in Kalsoe for her masterfulness. He would, on his own responsibility, invite this good lady to Siov, and contrive to shift the reins of management into her leathery hands. The interest in the estate that had been bequeathed to him by old Petersen was realisable; but he knew that it was morally conditional upon his marriage with Frida. Thus there was nothing to keep him in Siov, and since not in Siov, in Faroe either. He would go forth with this Cain's brand upon him, and try and make a new life for himself in America. At twenty-seven one can hope ardently. And, after all, his conscience did not treat him one quarter as severely as Frida. If only he had loved her less, he could have borne this second expatriation as easily as (that is, with not more suffering than) the first. But the worst of it was, that the knowledge that Frida had become what she had become for love of him, and naught else, had intensified his love for her immeasurably.

This was how matters stood in Siov on the eighteenth of September, when word drifted down Kollefjord from Leinum that the English gunboat had returned from Iceland and was in Westmanshayn.

No one but Douglas and Frida knew the effect the coming of the Goshawk had had upon their two lives. Yet somehow the maid who told her mistress the news expected that it would interest her. The girl had put two and two together, and had the dim fancy that Frida's swooning and Frida's sudden change towards 'the master' (as they called Douglas) were both connected with the hard-featured ship's officer with the gold band round his hat.

'Frida,' said Douglas that evening, 'I am going to Westmanshavn; the gunboat is there. I must see the man who came—you know why and when.' Nothing more than the way the girl lifted her eyes to him, with a sudden light of love and animation, proved to Douglas that in her heart she had never felt more fondly towards him.

'Do not go,' she cried, pleadingly. 'They will take you. And, besides, Marta tells me that if the fog keeps away to-morrow, there is a party of the men coming to climb Skelling and descend into Siov. He will be among them.'

'How do you know that?' inquired Douglas

quickly.

'I cannot tell how I know it, but I feel that it will be so. You will not go?'

'I will not go. But listen, Frida; this life of ours must end. A little longer, and you will have seen the last of me.'

He had expected her to receive this news excitedly, perhaps with fresh swoons, or even an hysterical outburst of reproaches or tenderness, for he had learned much of the strange contrariness of woman's nature. Instead of this, she put her white hand (still with the ring upon it that he had given her) on his arm, and, looking him calmly in the eyes, said:

'Wait; I think all will be well. I cannot tell how, but I have dreamed, and I believe the

dreams will come true.'

'Frida!' cried the young man, himself in a passion of affection. He would have taken her in his arms, but her extended hands, as she said, 'Not yet, Douglas,' effectively restrained him.

'I pray we may not have to part,' the girl murmured almost under her breath; and then she

ett hin

That day waned to night with leaden slowness for Douglas. He yearned to know the particulars of his crime. When he had struck the blow, and seen his enemy senseless and bathed in blood at his feet, he had fled; and ever since he had remained in ignorance of what had afterwards happened. Was he still sought by the officers of the law—to be hung when caught? And what said they of him in Kirkwall, where he had been born and had grown to manhood with the goodwill of all who knew him—save only the man who had tempted him to wreak the Almighty's vengeance upon him?

The following day opened blithely enough for September. The wind was north again, and a light sprinkling of snow was on the tops of the fields.

At breakfast Frida asked in a low and tremulous voice:

'Will the weather remain good, do you think ?'

'Good enough for them, no doubt,' Douglas had replied.

How he longed to have gone in the first glow of the morning towards Skellingfjeld's huge roots and scaled the giant from the east to meet the English sailors on the summit! But he remained faithful to his promise to Frida.

He worked through the morning as best he could, ever turning his eyes toward Skelling's

gigantic head. It was possible, he thought, to distinguish the forms of the tourists on the summit, if they were there. With the telescope at any rate it was possible enough. And so he went for the glass and looked through it again and again—until noon had arrived.

By then, however, something had happened. The wind had shifted to the west, and the inevitable sca-fog had swept up and swathed great Skelling, all except its enormous, square, black head, with the blood-curdling precipices on its four sides. They were used to these sights in Kollefjord, but to a stranger it would have seemed more than half a miracle, or a supreme natural marvel at the least.

Yet not for long was Skelling's crown left unveiled, hanging as it were between the murky heavens and the fog-wrapped earth. Soon all was mist. Even the waters of the *fjord* were hid; and it was possible for a Kolfefjord man to lose himself though he were but a good stone's-throw from his own cottage.

It was just ere the absolute obliteration of Skelling that Douglas received a shock. He was staring at the mountain-top through the glass, when it seemed to him he heard a cry like that of a man in mortal agony. Where before had he heard such a cry in such a tone? Both were familiar to him. Then, as he was moving the glass, he saw two moving dots on Skelling's edge. That was all. The fog cut off his chances the next moment.

This adventure, if so it might be called, much impressed Douglas. None knew better than he that if there were men on Skelling at that time they were in a compassionable plight. The mountain's cliffs and chasms were not to be lightly tackled even in the best of weather.

He told his surmises to one of the Siov farmers. This man uttered an ejaculation which was a sort of requiem upon the Goshawk's men if they had been caught in the fog. As for the thought of going to their aid, the Siov man treated it as the notion of a lunatic. As well might one man leap into a vat of boiling oil to rescue a comrade who had fallen headlong therein.

'We must just wait for the morrow,' said the man.

It was a long weary night that followed this day. Both Douglas and Frida slept little through it. Several times Douglas rose from the blue feather-bed on which he lay, and looked out to see if the stars were yet visible. It was, however, five o'clock ere the fog broke sufficiently for this. Then Douglas dressed himself and prepared for the journey of exploration that was before him.

He woke three other men, and having warmed their throats with hot coffee and put flasks of corn brandy in their pockets, they set forth up the valley. Never had Kollefjord looked more lovely than on this chill September morning, with the stars mirrored in its glassy, dark depths.

They had plenty of hard work before them. When they were a few hundred feet up the

mountain they began to shout; and they continued arousing Skelling's mighty echoes until the dawn had broken, and Kollefjord was at their feet—a frightful distance down.

They had got to the summit of the first of the mountain's cubes, when they fancied they heard a response to their shouts. Listening intently, they were assured of it. In half-an-hour they had absolute proof of it in the four British tars, wan and miserable-looking, whom they found in a niche of the mountain, precipice-bound, half-frozen and hungry.

Douglas scanned the men narrowly.

'Oh, by the way,' suddenly exclaimed one of them, 'there's poor Porteous. I reckon he's dead as mutton now; but we ought to make sure!'

'Porteous!' said Douglas, and his heart stopped beating.

'Yes; he slipped last night and fell no one knows where. We ought to find him.'

'We will find him — and alive, please God!' cried Douglas.

And they did. But it was not for long. He was sensible, but shockingly damaged. There seemed little likelihood of getting him down the mountain alive. Brandy and care, however, between them worked wonders with him.

He had not spoken so far, nor when they were on the Siov road and nearing Petersen's farm. Periodically he had opened his eyes and closed them. It seemed to him that he could not open them without seeing Douglas Graham, and he resented it. But anon, as his vitality weakened, the strength of his resentment also lost force. Thus it happened that, close to the farmyard, their eyes met.

'You know me, Nick Porteous?' asked Douglas tremulously.

The words 'I know you' were whispered back.

They got him into the 'best room' of the house, and having deposited him, the Jack-tars straightway returned to Westmanshavn to report themselves.

Then Douglas went to Frida and told her everything. He was not a murderer after all. By the strange working of Providence, he had been able to save the fragments of life left to his enemy, whom he believed he had killed long ago.

'Come, Frida, and hear it from his own lips,' he said.

'I do not want to,' was the glad reply. 'believe it.'

'Oh, but I wish you to, sweetheart. He will speak too—I feel that he will, before dying.'

In this hope, however, until the last moment, Douglas seemed to be deceiving himself. Porteous lay dying and apparently incapable of any effort, until the evening. Then, just when the crimson western flush was on the tops of the fjelds over against Siov, and the crimsoned cloud-fleeces were mirrored in the waters of the fjord, Porteous wrenched himself into a sitting posture.

'Graham,' he cried. Douglas was near. 'Coming,' he responded. 'Frida, I want you,' he added.

The two went to the dying man's side, and Douglas supported him.

'I—I want to say, Graham,' stammered Porteous—'that I—I'm sorry—you—you didn't kill me before, but I'm dead enough now, or soon will be, I guess.'

He hurried through the final words at a great rate, and had hardly ended them when he gasped and became a burden like lead in Douglas's arms.

'Are you satisfied, my heart?' asked Douglas when he had taken Frida out of the room.

For answer she put her hand between his two, and then stooped and kissed the uppermost of them.

AN OLD-FASHIONED RAILWAY LINE.



HEN Stephenson began to lay down his first railways, and so inaugurate a new mode of travelling, one of the earliest lines to be constructed was the little, narrow-gauge line, about seven miles in length, between

the towns of Bodmin and Wadebridge in Cornwall. For over sixty years it was the only railway line touching these places; but now that the Great Western and South-Western Railways are extending themselves in many directions over the south-western county, it has been swallowed up by the latter system, and its pristine nature has been utterly destroyed. Before the remembrance of its quaintness and originality is allowed to pass into oblivion some record deserves to be made.

What would the traveller of to-day think of a railway whose stations possessed no platforms, whose stationmasters were also booking-clerk, porter, ticket-inspector, station policeman, shunter, and general factotum; whose first-class carriages were wooden-seated conveyances similar to trucks, open to the sky; and whose third-class carriages were covered trucks, almost like the meat-vans of to-day—windowless, bufferless—and were also used as guards' and luggage van? Yet this was the state of affairs which prevailed on this old-world railway up to the year of the Queen's Jubilee (1887).

The line itself was not enclosed in any way, but the public were at liberty to wander over it at will, and turn it into a thoroughfare and promenade. The engines were of a very primitive type, and their speed very rarely exceeded ten miles an hour. If any obstruction appeared on the line, the engine-driver promptly stopped his train, and got down to remove it or drive it away if it were cattle or other animals. The train was often stopped to recover passengers' hats, which, owing to the open carriages, frequently blew off. Passengers might board the train, or get off, at any point on the journey; it was only necessary to hold up stick or umbrella, in the same manner as old ladies stop the trams, to bring the train to a standstill.

The fare was a shilling, each way, first-class, and sevenpence third-class. Tickets were triangular—either blue or white—and were not dated, because they were used over and over again.

A hole was conveniently punched in the middle, so that they could be kept on a string, and so be handy for future use. At the last, however, the use of tickets was discontinued, and the fares were collected by the engine-driver, simply because the supply of tickets was worn out. If any one boarded the train at any point on the line no regular charge was demanded; a tip to the engine-driver sufficed, as it also did if one wished to ride on the engine. It is most difficult to imagine that this state of affairs could have existed down to within the last ten years, but it is nevertheless a fact.

The regular train-service was one train each way on alternate days, so that it was totally unnecessary to consult any time-table. A story is told of a pushing 'commercial' who arrived at the Bodmin terminus of the line one day, out of breath with his exertions to try and catch the train, which had just left, and asked what time the next train would leave. On being gravely informed that this important event would happen 'the day after to-morrow,' he solemnly shook his head at the stationmaster, and said, 'Poor man, I suppose he has escaped from the big institution yonder' (meaning the county asylum). He soon found, however, that if he waited for the 'next train' he would lose his orders, and so he concluded to walk the seven miles to Wadebridge.

Excursions were occasionally run on this line, at which times the endurance of the panting little engine was sorely tried. When approaching any slight incline it was the custom of the stoker to go forward and sit between the buffers of the engine, and strew sand on the rails from a box. On one occasion the train, having got about half-way home, suddenly stopped by reason of the engine wheels 'skidding' on the slippery rails. The supply of sand being exhausted, the engine-driver promptly uncoupled his engine, and, telling the tired excursionists that 'he would be back directly,' gravely steamed away to the terminus for more sand, leaving the train and its load standing on the track for three-quarters of an hour.

The delays were always exasperating to the market-women, who used roundly to abuse the driver because they lost the sale of their butter and eggs. One old lady, when asked if she were

going on by the train, retorted to the 'general official,' 'Think I'm going to wait for thee; I shall get home sooner if I walk.' The enginedriver invariably waited until all his passengers were ready. In spite of all this laxity accidents were rare, nothing beyond an occasional 'run off' being heard of.

This little railway passes, or rather did pass (for the ruthless hand of the railway contractor has been at work), through some of the loveliest bits of scenery to be found in the county. The train ran for the greater part of the way beside the river Camel, through woods and along the hillsides, from which lovely peeps of country could be obtained. In other places the line had been cut through the solid rock, which towered

up like cliffs on either side. Where the line ran through any exposed spot, avenues of elms had been planted, which were in their prime when they were wantonly cut down as an offering to the god 'Progress.'

Altogether, this little railway, as a link with the past, was unique, and it seemed a pity to destroy it; but the South-Western Railway Company, by buying the line, has been enabled to keep a hold on the North Cornwall railway route, of which the line now forms part. The old stationmaster, Mr Worth (no doubt the oldest stationmaster in England), is still alive, and, although beyond work, loves to wander down by the side of his old line, and talk of the 'good old times' to all who care to draw him out.

THE MONTH: SCIENCE AND ARTS.

BAMBOO SCAFFOLDING.



this country during the past few years the use of bamboo for various purposes has greatly increased; and, judging from the bundles of the material to be seen at certain shops, there must be a growing

demand for it. In a recent report from the Netherland Indies, a French consul advocates the use of bamboo as a material for builders' scaffolding, and states that in Japan a lighthouse has been built with its help. Poles of great length and extreme lightness can be obtained; and they are much stronger than those of other wood, although the one is hollow and the other may be solid. He speaks of bamboo cane with a diameter of eight to ten inches and a length of sixty-five feet-albeit no such canes are imported into this country-and says that the power of resistance which such giants possess is enormous. Bamboo does not rot either in the ground or in water, possibly because of its flinty coat; and the older it grows the firmer and harder it becomes. We have no doubt that builders would take to bamboo instead of fir poles if they could get them.

JAMAICA.

A very interesting paper about this important British possession was recently read before the London Chamber of Commerce by one who for many years was governor of the island—Sir Henry Blake. He describes its unrivalled beauties in glowing terms, and its climate as being of a range in which every tropical and subtropical product, and many of those of the temperate regions, can be grown. The sugar industry has suffered terribly in consequence of the foreign bounty system; but Jamaica, unlike some other of the West Indian Islands, has alternative industries, and promises of new ones to be established, which

should still keep her in a flourishing condition. As reported in our columns at the time, an attempt was made last year to import oranges to Britain; but, owing to bad packing of the fruit, it arrived here in bad condition. The Jamaica oranges are of splendid quality; but they are considered too light in colour for the British market, and it has been proposed to darken them by artificial means. Sir Henry is much opposed to such a course, and would prefer to introduce them as a new brand, say the Jamaica Primrose Orange. He advocates the establishment of direct steam communication with England as a first step towards the advancement of the island's interests; and he prophesies that whenever commerce cuts its way through the Isthmus of Panama—whether by canal or ship-railway-Kingston in Jamaica will become one of the great commercial ports of the world.

INFUSORIAL EARTH.

A strange instance of like curing like is found in a memoir recently presented to the Paris Academy of Sciences by M. J. Hauser, in which that gentleman urges the use of infusorial earth as a perfect means of filtering liquids and separating from them the most minute organisms or particles of matter. The earth is first of all calcined at a high temperature, after which it is powdered and mixed to a creamy consistence with water. The mixture is then left to throw down a deposit on any suitable support, such as asbestos cloth or glass wool, and is then ready to act as a filter.

A NEW FIRE-EXTINGUISHER.

Mr T. A. Ready of New York City has patented a device which he calls a 'fire battery,' and its object is to join together and discharge the water from several fire-engines in one tremendous jet. The apparatus has the appearance of an ordinary field-piece of artillery, in that its principal part

consists of a long tube mounted upon trunnions and fixed on wheels. This tube is a tapering one, its larger end being closed and fitted with several nozzles, to which the hose from as many engines can be attached; from the other end the conjoined water-supply issues in a single jet. The tube can be moved or set at any required angle by means of a hand-wheel operated by one person, and the 'fire-battery' has other attachments for use in cases of emergency. We can well imagine circumstances under which this concentration of the water-power available would be of extreme value in the rapid extinction of a fire.

WINE FROM BARLEY.

An interesting account of the manufacture of various wines from barley has recently appeared in a consular report from Naples. The chief seat of this new industry is a factory at Wandsbeck, near Hamburg, which is said to produce a quarter of a million gallons of wine per annum. The barley, after being malted and carried to the fermentation-point, has added to it lactic acid and various ferments under certain careful regulations as to temperature. The mixture is then vatted and ripened artificially by heat, after which it is racked into smaller casks, or bottled, and is ready for consumption in three or four months' time. The wine has a somewhat high percentage of alcohol, which is wholly derived from the fermentation process, and is not the result of 'fortifying,' as the process of adding spirit is called. The new beverage is known as 'highly fermented barley wine,' and sherry, port, tokay, malaga, &c. are most successfully imitated by the producers. It is largely used in the German hospitals, and is favourably reported upon by the medical authorities.

PHOTOGRAPHIC MARVELS.

Most amateur photographers have occasionally met with ghostly markings on their gelatine plates, for which they could not account, and the manufacturer is generally blamed when such a spoilt plate is discovered. But it would seem from experiments lately conducted by Dr W. J. Russell, and described by him in the annual Bakerian Lecture delivered before the Royal Society, that several substances, some organic, some metallic, will affect a sensitive plate by being kept near it, and not necessarily in contact with it. Wood kept near a plate in darkness for a few days will picture itself on the sensitive surface, the image showing when the plate is developed. A sheet of perforated zinc will, in like manner, give up its pattern to the plate, and a nickel coin is especially active, giving an excellent copy of all its markings in a comparatively short time. Gum copal and printers' ink are two of the organic substances which are most active—a reminder to the amateur not to wrap his plates in newspaper. Dr Russell states that the general conclusion to be gathered from the experiments is, that the metals and substances under consideration have the property of giving off vapours which affect the sensitive surface of a photographic plate; that these vapours will pass readily through such bodies as gelatine, celluloid, collodion, &c.; and that the action is greatly intensified by a rise of temperature. Dr Russell will continue his experiments, and expresses the hope of being able to bring before the Royal Society further developments of these curious and, at the present time, little understood actions.

TROUT FROM NEW ZEALAND.

Twenty-two fine trout, of an average weight of five pounds, were recently brought to London by the steamship Otarama. These fish five weeks previously were swimming about in one of the rivers of New Zealand, and were taken with rod and line. They were brought to this country frozen into blocks of ice, as certain flower-blooms have previously come to us from the antipodes. Perhaps the most interesting part of the story is that these fish were hatched in New Zealand from trout ova which were originally sent to the colony from Britain. They come to us as a very satisfactory proof that the acclimatisation of British fish in New Zealand is an accomplished fact. It would be interesting to know how far the flavour of the fish is retained after its long sojourn in an envelope of ice. Salmon which has been kept for any long time in a frozen state is certainly very inferior to freshly-caught fish.

THE VALUE OF WORMS.

It is an old saying that we do not appreciate the worth of a thing until we have lost it. Possibly the worthy farmers who own the large tract of land in Essex which was in November last flooded by salt water, owing to the break down of a sea-wall, think of this adage when they ruefully look at their sodden ground. The despised worms by their constant burrowings kept the land well drained; but when the sea-flood came they were all killed and the sea-birds had a great feast. That land, measuring about fifty thousand acres, is still in a spongy state, and is likely to remain so until the farmers' friends—the worms—have time to recover their lost position.

BOILING WATER FOR A HALFPENNY.

The latest application of the coin-in-the-slot principle is one which will be greatly valued by the poorer inhabitants of our large towns and cities. Lamp-posts are being erected in busy centres, so arranged that the waste heat of the gas is employed to heat a cistern of water, from which a jugful can be obtained by any one by the expenditure of one-halfpenny. The 'little bit o' fire' for boiling a kettle in a poor home is often a consideration of some moment,

to say nothing of the weary time which has to elapse before that kettle will 'come to the boil.' Under the new dispensation all this trouble will be avoided for the expenditure of a halfpenny, and the system is already in active operation both in London and Liverpool, and it will presently be greatly extended. The installation in Leicester Square, London, which will be patronised by all sorts and conditions of men, women, and children, will be reinforced by penny packets of tea, coffee, meat-extract, and other provisions, and the tired wayfarer will now have the means of refreshing himself at moderate cost without entering a tavern. It may be mentioned that the syndicate under which this new system is managed agrees to pay the vestries half the cost of the gas consumed in each lamp, so that the ratepayers have an indirect interest in the success of the new venture.

BESSEMER STEEL.

The death of Sir Henry Bessemer removes from among us one who earned a very distinguished position on the roll of fame, for by his inventive genius he caused a revolution in the manufacture of steel which has proved to be of incalculable value to his countrymen, and indeed to the whole Under the old method molten iron was converted into steel by the operation called 'puddling,' in which heavy masses of the semi-plastic metal were turned over and over at the end of long rods-a work most laborious to the men engaged in it. The object of this puddling was to bring fresh surfaces of the metal in contact with the atmosphere, so that the contained carbon could be burnt out of it. Sir Henry Bessemer conceived the idea of bringing the air to the iron instead of the iron to the air, and in his process air is pumped from below into a mass of molten metal many tons in weight, the chemical action raising the temperature to a white heat and decarbonising the metal. It was long before the steel-makers of the country saw the advantage of the new process-not, indeed, until Bessemer had set up steelworks at Sheffield in their very midst, and they found themselves being undersold by about £20 per ton. Unlike most inventors, Bessemer reaped the reward of his patient labours during his lifetime, and amassed a fortune.

COMPRESSED AIR.

On the American railways compressed air is being used to a great extent and for a variety of purposes. Among these is the spraying of the track on the Pennsylvanian line with refuse petroleum, which is found to be a most effective method of preventing dust—an operation which does not need repeating for several months, and costs under £10 per mile. Compressed air is also used for sweeping and dusting the passenger cars, and for painting them and the various railway buildings. Cranes and riveting and other machines are also

operated by the same agency; and even the bellows of the smiths' forges are replaced by a pipe and stop-cock. Still more important is the application of compressed air to the working of signals. At all the more important stations this system prevails, by which the signalman, instead of pulling over a heavy lever which taxes all his strength, can do the same work by means of a small bell-handle. Away from the towns and cities, where the railway work is not complicated by shunting and other operations, a train signals when the line is occupied or when it is clear to the train which follows it, and the signalman is altogether dispensed with. All this is done automatically, and the motive-power is compressed air.

SKETCHES BY TELEGRAPH.

There have been many reports of late of a wonderful German invention by which pictures presented at one end of a telegraph-line can be seen at the other end. A variation of the story is that a newspaper exhibited at one end of the line can be instantaneously reproduced at the distant point. There is obviously much exaggeration here, and we must wait for more authoritative statements than telegrams at present afford. In the meantime we have received particulars of the Telepantograph, an apparatus patented by Mr R. Greville-Williams of Heywood, Manchester, by which drawings, photographs, and documents in fac-simile can be telegraphed from place to place. The principle of the machine is as follows: The drawing or photograph—the latter must be cut up into dots or lines as for ordinary process work-is expressed in resinous ink on copper foil. This foil is bent round and fastened to a cylinder, which, as it revolves, is traversed by a point, the movement being much the same as that of a screw-cutting lathe. The surface being conducting and the ink an insulator, the current is interrupted whenever the point goes over a dot or line, and these interruptions, acting on similar mechanism at the receiving end, call into play a stylus or pen which reproduces the original design. Bakewell in 1850 used apparatus of the same kind to reproduce drawings on chemically prepared paper; and about thirty years later M. d'Arlincourt produced much the same results with apparatus which was tested at the General Post-Office. Mr Greville-Williams has designed a more perfect instrument, and he has at his disposal photographs cut up into the necessary dot and line; but in other respects he seems to have called into play mechanism of the same type as that previously used for the same purpose.

AT THE MAKING OF CANADA.

An article appeared in the January part of Chambers's Journal entitled, 'At the Making of Canada,' by Isabella Fyvie Mayo. The suggestion towards writing the article came from the perusal of a Canadian work—In the Days of the Canada

Company (Briggs, Toronto)—by the Misses Lizars, in which the doings of the Canadian pioneers are set down at length. Mrs Mayo, however, having been twice in Canada, was able to impart local colour to her paper from personal experience, and otherwise she utilised the fruits of wide reading and knowledge of her theme. From all these sources the matter was gathered, digested, and set down in readable form.

Exigencies of space required some slight curtailment of this article; and, unfortunately, in the deletions made by the Editor, Mrs Mayo's reference to the book In the Days of the Canada Company was removed. The Editor can only now express regret that this unintentional injustice was done to the Misses Lizars, and to Mrs Mayo, who had duly acknowledged her indebtedness to their volume.

LONDON TREE-GHOSTS.



HERE are many shadows in the 'stony-hearted stepmother,' which is De Quincey's phrase for London, and why not those of the vanished trees? She is a stepmother to most aspirants, yet with a fascina-

tion of her own generation which is centripetal. Tradition, legend, romance, history, and tragedy pervade her every street, so many centuries old; but the American or the exploring provincial knows a hundred times more about them than the average modern Londoner, whose ignorance of his own mighty city is only equalled by his familiarity with its modern up-to-date ephemeralisms. If that satisfies him, why should the student-Londoner do more than shrug his shoulders?

But to him who has perused the story of the mighty and ancient city - more continuous in its political and social history than any other European capital - there are innumerable ghosts in London, who pleasantly haunt him day and night, and make him never less alone than when alone. Among these-and perhaps less chronicled than any-are those of the trees. In one of his letters Lord Beaconsfield says that one grows weary at last of mountains and lakes, however grand, but that the woodland never loses its charm. So to us, who love to conjure up in our mind's eye the vanished aspect of some of the most crowded parts of the huge 'province covered with houses,' the ghosts of the woodland equally delight the memory.

London's tree-ghosts are many. They haunt some of the places where the roar and rush of traffic would seem to banish any echo of the past. Look, for instance, at St Martin's Lane—the name itself suggests a backward flight over five hundred years to the piety and rusticity which marked the common life around the little city of London; and there, despite its modern aggregate of noise and prose, the tree-ghosts loom stately to the eye that can perceive them. The pleasant country lane of the Tudor days, yet even then encroached upon by buildings, winds before us. The placid charm of the garden and vine is there, in addition to the dignity of immemorial

elms. Even so late as the middle of last century the former associations were facts, though the hedgerows and these towering trees had vanished. 'Rainyday' Smith, in his Life of Nollekens—a storehouse of London tradition—tells us that No. 96 in the lane had been famous in that century for its ample garden, which contained vines from whose grapes a pipe of wine had been annually made for many years by the mother of the writer's informant. And in yet more crowded and prosaic Clerkenwell there is a spot, long built over, but known locally, for the same reason, as 'The Vineyard.'

Many ghosts haunt Smithfield, such as loom large in history, and whose memoirs are inextricably woven in the story of England. Of these it were the task of genius alone to adequately speak. But we may, in humble guise, choose as our theme the arboreal shades which the mind's eye can perceive where that of the body but sees gigantic meat-markets filled by jostling thousands on Saturday evenings. Here stood for centuries at the northern end immemorial elms of grimmest memories. For the elm was in our distant forefathers' days the favourite natural gibbet. The associations of the past and present are thus gloomy-save for the cheery cawing of the rooks, who love it as a nesting-place. Many an unhappy victim was hanged on those elms, the most illustrious of whom was William Wallace, shamefully done to death. Elms, however, in our London arboreal ghostland there are whose history is not tinged with tragedy. Such are those which ran in a double line from Balmes House, outside Hoxton-its site is now a streetand so made a charming entrance to the then pretty village, which, in its toiling, crowded, and squalid aspect, now owes such romance as it possesses of the present to Sir Walter Besant's magic pen, who paints it in his usual photographic fashion in his Children of Gibeon.

Some of those elms which adorned the estate of Sir George Whitmore—whose name survives in the road in which they stood—were blowndown in a great gale in the last century, and the fact was accounted important enough to be chronicled in the periodical literature of the day.

Then west, in palatial club-land, are the shades of the elms in Pall Mall, and east in Finsbury Square those of the trees under which its citizens were wont to walk in the summer evenings in the fields which opened on the country. Still farther eastward, in Houndsditch—of which the name is sufficient to those who know their London as an antithesis—were 'fine hedgerows of elms and pleasant fields very commodious,' which Stow mentions as flourishing forty years before his date—1603. If the dryads of the elms wander round their past dwelling-places, how specially poignant must be their feelings in Houndsditch!

Wander we down Drury Lane into the Strand, discarding even such popular memories of the vanished centuries as the early career of the world-known theatre and Nell Gwynn, standing, as Pepys saw her, on May Day watching the Strand revelries, and let us look for another tree's shadowy presentment amid the sordid crowd of thickly-tenanted houses full of the pathos of toil and poverty. A quest unlikely, one would think, to be rewarded with success. Yet one of our ghosts is here, and could, were it able to emulate Tennyson's talking oak, far surpass that veteran's recollections. For just where the narrow row of houses known as Little Drury Lane commencessome of which reveal the aspect of the Stuart days as vividly as does The Fortunes of Nigelstood a magnificent elm which was opposite an ancient inn known as 'The Crown.' A tree this was which had seen many generations and episodes when north of Holborn ran the fields, when Drury Lane was a fashionable locality, and my Lord Craven's drums woke its echoes from his splendid house-a tree which, like the hostelry opposite it, figured in the social London life of the day. On the other side of the Strand, dull and respectable Craven Street, without a green leaf, is haunted by similar ghosts-those of the stately row of trees which in Queen Anne's day ran downwards to the Thames, and under which the couples wandered in April's ivory moonlight to take boat on the then silvery river.

The roar and din of Fleet Street, the centre where throbs the mighty journalism which shapes the opinions and flashes news from every corner of the earth for the millions of the Englishspeaking race, would seem sufficient to banish any memory of boughs or leaves, or the peaceful placidity of arboreal life. Yet to those who can see it alike by day and equally busy night-for Fleet Street never sleeps—the shade of one famous tree is imperishable. In Wine Office Courtwhere Goldsmith lodged when Johnson, hurriedly summoned, went after sending a guinea in advance, and finding the poet arrested at his landlady's suit, but with the guinea changed and a bottle of Madeira its result, put the cork in the bottle, and took the MS. of the Vicar of Wakefield to sell to the publisher—was a fig-tree with a curious history. Early in the reign of George

the Third it was planted by the Reverend Mr Barnes, the Lecturer of St Bude's, where Lovelace, of

I could not love thee, dear, so much Loved I not honour more!

fame lies entombed. The slip was cut from a yet more ancient fig-tree growing opposite a house to which it gave the sign in Fleet Street. This fig-tree flourished in Wine Office Court till 1820, when it was struck by lightning; but it is said that from its slips many trees in various parts of the country have sprung. What a compendium of history, foreign and domestic, in those crowded years does not that vanished Fleet Street fig-tree represent! And all round the crowded purlieus of the vast Midland Railway's terminus there are many tree-ghosts fitly associated with the days of Leigh Hunt, when Somers Town was charmingly rural and the dwelling-place of many remarkable men who loved its flowers, trees, and gardens.

SWEET ROSE.

Sweet rose, awaking to the light,
Into this fair world born
A little folded bud at night,
A flower at break of morn!
Yet thou a tiny tear of dew
Within thy heart dost bear,
Though earth is glad and life is new,
And thou art sweet and fair!

Sweet rose, unfold thy heart and shed
Thy perfume wider yet;
Though soon the summer hours are fled,
Thy fate, sweet rose, forget!
With fragrance all the garden fill,
That those who pass and see
Shall deem the bright world brighter still
Because of it and thee!

Sweet rose, God made thee fair to take
Thy tiny place and part,
To soothe some spirit like to break,
To cheer some burdened heart.
Weep not for aught that fate may send,
But, ere thy day is spent,
Live out thy life unto its end,
Then die and sleep content!

CLIFTON BINGHAM.

*** TO CONTRIBUTORS.

1st. All communications should be addressed 'To the Editor, 339 High Street, Edinburgh.'

2d. For its return in case of ineligibility, postage-stamps should accompany every manuscript.

3d. To secure their safe return if ineligible, ALL MANU-SCRIPTS, whether accompanied by a letter of advice or otherwise, should have the writer's Name and Address written upon them IN FULL.

4th. Poetical contributions should invariably be accompanied by a stamped and directed envelope.